IN THE CIRCUIT COURT OF THE 15TH JUDICIAL CIRCUIT IN AND FOR PALM BEACH COUNTY, FLORIDA

KIM BANNER, as Personal Representative of the ESTATE OF JEREMY BANNER, deceased,

CASE NO.: 50-2019-CA-009962 (AB)

Plaintiff,	
V.	
TESLA, INC. a/k/a TESLA FLORIDA INC.	و.
Defendant.	,

PLAINTIFF'S MOTION FOR LEAVE TO AMEND THE COMPLAINT TO ASSERT A CLAIM FOR PUNITIVE DAMAGES

COMES NOW the Plaintiff, KIM BANNER, as Personal Representative of the ESTATE OF JEREMY BANNER, deceased, pursuant to section 768.72, Florida Statutes, and hereby files this Motion to Assert a Claim for Punitive Damages against Defendant TESLA, INC. ("Tesla"). For the reasons discussed below, the Plaintiff contends that Tesla is guilty of intentional misconduct and/or gross negligence for selling a vehicle with an Autopilot software system that Tesla knew to be defective based on a prior fatal accident and based on warnings from government regulators. Rather than taking appropriate steps to ensure the safety of its customers and other drivers on the road in the United States, Tesla and its CEO, Elon Musk, made the intentional decision to continue profiting billions from the sales of their defective vehicles.

Because Plaintiff has made a reasonable showing against Tesla under the plain language of section 768.72, the Court should grant this motion. It is well-settled that auto manufacturers are subject to punitive damages if their conduct warrants it, and there is no Tesla exception to accountability.

I. INTRODUCTION

- 1. This lawsuit arises from the wrongful death of Jeremy Banner as the result of a motor vehicle accident involving his Tesla Model 3 and a tractor trailer, which occurred in Delray Beach on March 1, 2019. *See* Amended Complaint.
- 2. The accident occurred when the tractor trailer pulled in front of Mr. Banner's Tesla, as Mr. Banner was driving on State Highway 441, a roadway with extensive cross-traffic. Mr. Banner was killed when his Tesla drove under the perpendicular trailer at full speed.
- 3. Mr. Banner's Model 3 was equipped with Tesla's "Enhanced Autopilot" software system that promised superior safety over other vehicle manufacturers. When purchasing his vehicle, Mr. Banner paid \$5,000 for "Enhanced Autopilot," which is an upgrade over Tesla's standard Autopilot. Standard "Autopilot," which includes "Traffic-Aware Cruise Control" and "Autosteer," enables all Teslas to "steer, accelerate, and brake automatically within its lane." In addition to the standard Autopilot features, Mr. Banner's "Enhanced Autopilot" promised additional features like "Navigate on Autopilot," "Auto Lane Change," "Autopark," "Summon," and "Smart Summon."
- 4. At the time of the accident, the Autopilot system in Mr. Banner's Tesla was activated, but the Autopilot system failed to properly detect and/or respond to the tractor trailer, which pulled into the path of Mr. Banner's Tesla. As a result, the Autopilot system failed to engage any breaking, deceleration, or steering to prevent the fatal underride accident.
- 5. Plaintiff, who is Mr. Banner's widow and the personal representative of his Estate, filed suit against Tesla and the tractor trailer company, Firstfleet, which subsequently entered into

¹ Mr. Banner's vehicle purchase agreement is attached as Exhibit M.

² https://www.tesla.com/autopilot

³ https://www.tesla.com/support/autopilot

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a settlement with Plaintiff. The remaining product liability and negligence claims against Tesla

center around its defective Autopilot system.

6. After engaging in discovery, Plaintiff has uncovered evidence demonstrating that

Tesla is guilty of intentional misconduct and/or gross negligence—conduct that a reasonable jury

could find warrants the imposition of punitive damages. As discussed below, the evidence shows

Tesla, through its officers, employees, and agents, knew that the vehicle at issue, a Tesla Model 3,

had an Autopilot system that was not fully tested for safety and was not designed to be used on

roadways with cross-traffic or intersecting vehicles. Nevertheless, Tesla programed Autopilot to

allow it to be used on roadways that Tesla knew were not suitable for its use and knew would result

in fatal accidents resulting in Tesla customers' deaths.

Despite knowing of these deficiencies, Tesla advertised Autopilot in a way that 7.

greatly overestimated its capabilities and hid its deficiencies. Lastly, Tesla knew that Autopilot

was unable to appropriately detect and respond to tractor trailers in cross-traffic situations.

Specifically, Tesla knew that in May 2016—almost 3 years prior to the accident in this case—

Autopilot had been involved in causing another fatal underride accident between a Tesla and a

tractor trailer.4 Tesla had all this knowledge prior to the crash that killed Plaintiff under

substantially similar circumstances.

Accordingly, Plaintiff now moves this Court for leave to amend the complaint to

assert a claim for punitive damages, as set forth in the proposed Second Amended Complaint,

attached as Exhibit A.

https://www.nytimes.com/2016/07/02/business/joshua-brown-technology-enthusiast-tested-the-limits-ofhis-tesla.html#:~:text=Brown%20became%20a%20victim%20of.in%20a%20self%2Ddriving%20car.

II. FACTUAL PROFFER

A. Background

9. For years, Tesla and its CEO, Elon Musk, have deceptively and misleadingly marketed its advanced driver assistance systems ("ADAS") technology as autonomous driving technology under various names, including "Autopilot," "Enhanced Autopilot," and "Full Self-Driving Capability" ("FSD"). Although Tesla's marketing does not always distinguish between these systems, Plaintiff again notes that Mr. Banner's vehicle was equipped with "Enhanced Autopilot."

- 10. Tesla has deceived and misled consumers regarding the current abilities of its ADAS technology by representing that it was perpetually on the cusp of perfecting that technology and finally fulfilling its promise of producing a fully self-driving car. Although these promises have proven false time and time again, Tesla and Musk have continued making them to generate media attention, to deceive consumers into believing it has unrivaled cutting-edge technology, and to establish itself as a leading player in the fast-growing electric vehicle market, which is an industry worth billions of dollars.
- 11. Despite portraying itself as a leader in autonomous vehicle technology, Tesla's ADAS features have been surpassed by numerous automaker competitors that have developed autonomous driving technology far more advanced than Tesla's, and now available in some consumer markets. At the same time, former Tesla employees and investigations have revealed damning information that now makes clear that, contrary to Tesla's repeated promises that it would have a fully self-driving car within months or a year, Tesla has never been remotely close to achieving that goal.

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- 12. For example, to accompany the 2016 launch of Tesla's "Enhanced Autopilot" and "Full Self-Driving" versions of its ADAS technology, much of the Tesla Autopilot engineering team dropped everything to produce a video that purports to show a Tesla car driving itself. The video begins with the following message: "The person in the driver's seat is only there for legal reasons. He is not driving anything. The car is driving itself." In reality, Tesla employees who made the video would later reveal that the car in the video had significant assistance from commercial mapping software not available to Tesla customers, and that the car still performed poorly and even ran into a fence during filming. With the assistance of a large team of Tesla engineers, the car had to run the same route over and over again before Tesla got acceptable video that appeared to show a car capable of driving itself. Even though the video was debunked as deceptive and misleading years ago, Tesla continues to prominently feature it on its website.
- 13. Seven years later in 2023, Tesla has yet to produce anything even remotely approaching a fully self-driving car. Instead, Tesla pushes out "updates" to Tesla owners/customers, who effectively act as untrained test engineers testing experimental software on public roadways. There have been numerous collisions involving Tesla's purportedly cutting-edge ADAS software, including Tesla vehicles plowing at high speeds into large stationary objects such as emergency vehicles and an overturned box truck. Dozens of people have suffered fatal and other serious injuries as a result of these ADAS-related collisions triggering a host of investigations by state and federal regulators.

⁵ https://www.tesla.com/autopilot

⁶ See, e.g., The Dawn Project, "Unsafe at Any Speed," https://dawnproject.com/wp-content/uploads/2022/06/Tesla-ADAS-unsafe-at-any-speed-NA.mp4?_=1 (collecting video clips showing such problems).

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14. As information has trickled out of the secretive company via former employees and

investigations, it has become increasingly clear that Tesla knew for years its statements regarding

its ADAS technology were deceptive and misleading, but the company made them anyway. Tesla

did so to generate excitement about the company's vehicles and thereby improve its financial

condition by, among other things, attracting investment, increasing sales, avoiding bankruptcy,

driving up Tesla's stock price, and helping to establish Tesla as a dominant player in the electric

vehicle market.

15. For example, in 2016, Musk tweeted a bold prediction—that a Tesla vehicle would

complete a fully self-driving trip across the United States by "next year." Later in 2016, Tesla

announced on its official blog that "All Tesla Cars Being Produced Now Have Full Self-Driving

Hardware." The blog post included the misleading October 2016 video of a Tesla car purportedly

driving itself without incident, and suggested that Tesla was on the cusp of bringing to market cars

that would be fully "self-driving" and have "full autonomy." When Tesla and Musk made these

statements, they knew there was no reasonable chance of Tesla being able to meet these forecasts.

16. In every year since 2016, Tesla and Musk have repeatedly made deceptive and

misleading statements to consumers indicating that a fully self-driving, fully autonomous Tesla

vehicle was just around the corner, often expressly stating that would occur by the end of that

calendar year or within the "next year." While tens of thousands of U.S. consumers have

purchased or leased new Tesla vehicles with ADAS technology, Tesla has yet to deliver on its

repeated promises of a fully self-driving car.

⁷ See The Tesla Team, "All Tesla Cars Being Produced Now Have Full Self-Driving Hardware," https://www.tesla.com/blog/all-tesla-cars-being-produced-now-have-full-selfdriving-hardware (Oct. 19, 2016).

⁸ See, e.g., The Dawn Project, "Elon Musk's broken promises," https://dawnproject.com/wp-content/uploads/2022/06/The-Dawn-Project-Musk-promises-1min-NA.mp4? =2 (collecting video clips of Musk making such promises from 2014 to 2021).

17. The reality of Tesla's ADAS technology is far different from what Tesla and Musk have spent years telling consumers. Tesla uses its customers as untrained test engineers to test drive its experimental Autopilot software on public roadways, which generates data that Tesla can use to correct the defects and deficiencies in its software. Along the way, scores of Tesla owners who believed Tesla's and Musk's deceptive and misleading statements about the capabilities of Tesla's ADAS technology have been killed and seriously injured when that technology failed, often in the face of routine roadway scenarios.

B. Public Timeline of Autopilot's Development, Crashes, and Investigations

- 18. In 2003, Tesla was founded by Martin Eberhard and Marc Tarpenning. The following year, Elon Musk made a substantial investment in Tesla and became chairman of the company's board.
- 19. In 2008, Mr. Musk became Tesla's Chief Executive Officer ("CEO"), and Tesla released the Roadster, which was the first mainstream electric vehicle powered by lithium-ion batteries.
- 20. In 2012, Tesla released its Model S sedan, and in 2017, Tesla released the Model 3 sedan—the vehicle at issue in this case.
- 21. In 2014, Tesla began equipping its Model S sedan with hardware that (although the necessary software was not yet active) was intended to allow vehicles to automate some steering, braking, and acceleration functions. Consistent with widely used industry terminology, Tesla originally called this feature "advanced driver assistance" before Tesla executives led by Musk

decided to change the name to "Autopilot." Tesla engineers expressed concerns that the name was misleading and suggested less misleading options such as "Copilot," which Tesla rejected.⁹

- 22. In October 2015, Tesla released its version 7.0 software, which enabled Autopilot on Model S vehicles. Robert Rose, the head of the Autopilot project, left Tesla shortly before the release. Evan Nakano, a Tesla Autopilot engineer who had worked on safety features, objected that Autopilot was not ready for release due to safety concerns of the known defects and deficiencies. When Tesla ignored his concerns, Nakano resigned in protest and wrote a resignation letter, circulated widely among Tesla employees, that called Autopilot's development based on "reckless decision making that has potentially put customer lives at risk." ¹⁰
- 23. By December 2015, Elon Musk was publicly stating that Tesla vehicles would drive themselves within about two years. Mr. Musk told Fortune magazine, "I think we have all the pieces, and it's just about refining those pieces, putting them in place, and making sure they work across a huge number of environments—and then we're done. It's a much easier problem than people think it is."¹¹
- 24. In January 2016, Elon Musk announced on a conference call with reporters that Autopilot was "probably better" than a human driver, and he stated that Tesla vehicles would be able to drive significantly better than humans within two to three years. ¹²

⁹ Cade Metz & Neal E. Boudette, "Inside Tesla as Elon Musk Pushed an Unflinching Vision for Self-Driving Cars," The New York Times (Dec. 6, 2021), available at https://www.nytimes.com/2021/12/06/technology/teslaautopilot-elon-musk.html; Tesla, "Tesla Self-Driving Demonstration" (Nov. 18, 2016), https://www.tesla.com/videos/autopilot-self-driving-hardware-neighborhood-long.

¹⁰ Ianthe Jeanne Dugan & Mike Spector, "Tesla's Push to Build a Self-Driving Car Sparked Dissent Among Its Engineers," The Wall Street Journal (Aug. 24, 2017), available at https://www.wsj.com/articles/teslas-push-tobuild- a-self-driving-car-sparks-dissent-among-its-engineers-1503593742.

¹¹ Kristen Korosec, "Elon Musk Says Tesla Vehicles Will Drive Themselves in Two Years," Fortune (Dec. 21, 2015), available at https://fortune.com/2015/12/21/elon-musk-interview/.

¹² Elon Musk, https://twitter.com/elonmusk/status/686279251293777920 (Jan. 10, 2016, 12:11 PM).

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- 25. About four months later, on May 7, 2016, Joshua Brown was killed in Williston, Florida when the defective Autopilot on his Tesla Model S failed to recognize a tractor-trailer crossing in front his car, which resulted in Brown's car striking and passing under the trailer at 74 mph. The top third of Brown's car was sheared off. Brown was a Tesla enthusiast who had previously made videos of himself using Autopilot, one of which was retweeted by Elon Musk just a few weeks earlier. Tesla later publicly stated that the Autopilot software on Brown's car failed to detect the white tractor-trailer because it could not distinguish it from the bright sky. Several months later, in September 2016, Tesla would announce it was confident it had fixed the defect in version 8 of its Autopilot software by increasing the system's reliance on radar so that it "would see a large metal object across the road." 15
- 26. Less than a month later, on June 2, 2016, Musk confidently announced that "autonomous driving" was "basically a solved problem," and that Tesla's Autopilot software was already safer than a human driver on highways. "I think we're basically less than two years away from complete autonomy—complete," Musk said. 16
- 27. On July 14, 2016, Consumer Reports took the unusual step of publicly calling on Tesla to take certain actions. It urged Tesla to "change the name of the Autopilot feature because it promotes a potentially dangerous assumption that the Model S is capable of driving on its own."

¹³ NTSB, Investigation No. HWY16FH018, Dkt. No. 2, "Crash Summary Report" (June 19, 2017), available https://data.ntsb.gov/Docket/Document/docBLOB?ID=40453253&FileExtension=.PDF&FileName=Crash%20Summary-Master,PDF.

¹⁴ Rachel Abrams & Annalyn Kurtz, "Joshua Brown, Who Died in Self-Driving Accident, Tested Limits of His Tesla," The New York Times (July 1, 2016), available at https://www.nytimes.com/2016/07/02/business/joshuabrown-technology-enthusiast-tested-the-limits-of-histesla.html.

¹⁵ Neal Boudette, "Elon Musk Says Pending Tesla Updates Could Have Prevented Fatal Crash," The New York Times (Sept. 11, 2016), available at https://www.nytimes.com/2016/09/12/business/elon-musk-says-pendingtesla-updates-could-have-prevented-fatal-crash.html.

¹⁶ Recode, "Elon Mush | Full Interview | Code Conference 2016," https://www.youtube.com/watch?v=wsixsRISz4&t=4675s at 1:17:55–1:21:20 (June 2, 2016).

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Instead of using the "misleading" name Autopilot, Consumer Reports urged Tesla to "name automated features with descriptive, not exaggerated, titles."¹⁷

- 28. On July 20, 2016, Tesla's official blog published a post by Musk, in which he misleadingly suggests that lack of regulatory approval was a major challenge Tesla was facing in bringing to market fully self-driving vehicles: "When true self-driving is approved by regulators, it will mean that you will be able to summon your Tesla from pretty much anywhere. Once it picks you up, you will be able to sleep, read or do anything else enroute to your destination. You will also be able to add your car to the Tesla shared fleet just by tapping a button on the Tesla phone app and have it generate income for you while you're at work or on vacation." ¹⁸
- 29. On October 19, 2016, Tesla released its Autopilot 2.0 software and announced that all new Tesla cars would come with a new suite of hardware (called Autopilot Hardware 2) comprising eight cameras, twelve ultrasonic sensors, and a forward-facing radar unit, which Tesla claimed would allow the cars to soon become capable of full autonomy.¹⁹
- 30. As part of the announcement, Tesla published on its official blog a post titled "All Tesla Cars Being Produced Now Have Full Self-Driving Hardware," stating "[w]e are excited to announce that, as of today, all Tesla vehicles produced in our factory including Model 3 will have the hardware needed for full self-driving capability at a safety level substantially greater than that of a human driver." In the same post, Tesla stated that "[s]elf-driving vehicles will play a crucial role in improving transportation safety and accelerating the world's transition to a

¹⁷ Consumer Reports, "Consumer Reports Calls on Tesla to Disable and Update Auto Steering Function, Remove 'Autopilot' Name" (July 14, 2016), available at https://www.consumerreports.org/media-room/pressreleases/2016/07/consumer-reports-calls-on-tesla-to-disable-and-update-auto-steering-function-removeautopilot-name/.

 ¹⁸ Elon Musk, "Master Plan, Part Deux," https://www.tesla.com/blog/master-plan-part-deux (July 20, 2016).
 ¹⁹ See Alex Nishimoto, "All New Tesla Models Will Feature Level 5-Capable Autopilot Hardware," Motor Trend (Oct. 20, 2016), available at https://www.motortrend.com/news/new-tesla-models-will-feature-level-5-capable-autopilot-hardware/.

human driver."20

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sustainable future," and that "[f]ull autonomy will enable a Tesla to be substantially safer than a

31. The blog post included a video made by Tesla's Autopilot team in the weeks before the release, which purported to show a Tesla driving itself without any human intervention from the person in the driver's seat, whose hands remain off the steering wheel throughout the video. The video begins with a note saying, "The person in the driver's seat is only there for legal reasons. He is not doing anything. The car is driving itself."21 However, multiple Tesla Autopilot employees who worked on the video would later report that the route taken by the car had been charted ahead of time by software that created a three-dimensional digital map (a feature unavailable to drivers using the commercial version of Autopilot), and that the video did not accurately show how the car operated during filming. For example, the car kept executing driving tasks poorly and engineers had to run the pre-programmed route over and over again to get video that would make it appear the car capable of driving itself. At one point during filming, the car crashed into a fence while on Autopilot and had to be repaired.²² None of these facts were referenced in the video or otherwise disclosed by Tesla, which intentionally withheld these known defects from the public and Tesla customers. The deceptive and misleading video was later used to promote Autopilot's purported abilities, and indeed is still featured on the company's website despite having been debunked for years.²³

²⁰ The Tesla Team, "All Tesla Cars Being Produced Now Have Full Self-Driving Hardware," https://www.tesla.com/blog/all-tesla-cars-being-produced-now-have-full-selfdriving-hardware (Oct. 19, 2016).

²¹ Tesla, https://wwwa.tesla.com/autopilot

²² See Metz & Boudette, supra note 9.

²³ See Tesla, https://wwwa.tesla.com/autopilot; Tesla, "Tesla Self-Driving Demonstration," https://www.tesla.com/videos/autopilot-self-driving-hardware-neighborhood-long (Nov. 18, 2016).

32. Also on October 19, 2016, the company held a conference call with reporters, during which Musk stated that all new Tesla cars would now include all the cameras, computing power, and other hardware necessary for "full self driving"—not a technical term but one that suggests truly autonomous operation. Musk repeatedly represented that autonomous vehicles were safer than human-driven ones, and even warned journalists that they would be "killing people" if they wrote negative articles about self-driving technology that dissuaded people from using it.²⁴

- 33. Musk's statements at the news conference "took the Tesla engineering team by surprise, and some felt that Musk was promising something that was not possible." Sterling Anderson, who was the head of Tesla's Autopilot program at the time, "told Tesla's sales and marketing teams that they should not refer to the company's technology as 'autonomous' or 'self-driving' because this would mislead the public." In a meeting after the October announcement, Mr. Anderson said the branding of Tesla's product was "Elon's decision." Two months later, in December 2016, Mr. Anderson resigned. 26
- 34. In 2017, the National Transportation Safety Board ("NTSB") made recommendations to Tesla and five other auto manufacturers working on ADAS systems, advising that they add safeguards to make it harder to misuse those systems. The NTSB also recommended that these automakers should place limits on where and when systems like Autopilot can be used. All the of the automakers, except Tesla, responded to the NTSB's recommendations. ²⁷

²⁴ Xautoworld, "Transcript: Elon Musk's Autopilot 2.0 Conference Call," https://www.xautoworld.com/tesla/transcript-elon-musk-autopilot-2-conference-call/ (Oct. 19, 2016).

²⁵ See Metz & Boudette, supra note 9.

²⁶ Dugan & Spector, *supra* note 10.

https://www.theverge.com/2020/2/25/21152984/tesla-autopilot-safety-recommendations-ignored-ntsb-crash-hearing.

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35. In March 2018, Apple engineer Walter Huang was killed when the Autopilot on his

Tesla Model X became confused at a fork in the highway and caused the car to veer sharply to the

left and crash into a concrete barrier in Mountain View, California. In the aftermath of that fatal

crash, the NTSB found that Tesla's Autopilot driver assistance system was one of the probable

causes of the crash due in part because of the known limitations of Autopilot's vision-based

processing system.²⁸

36. In March 2019, the accident in this case occurred. As noted above, Jeremy Banner

was killed when his 2018 Tesla Model 3 with Autopilot engaged drove under a tractor-trailer in

Florida. This accident was eerily similar to the 2016 accident in Williston, Florida—discussed

above—that killed Joshua Brown when his car drove under a tractor-trailer. The Plaintiff's

accident confirmed that Tesla had not fixed significant flaws and known defects in its ADAS

technology, as Tesla claimed in September 2016, and showed that Tesla still had not done so two-

and-a-half years later.

37. One month later, in April 2019, at an event in Palo Alto, California that Tesla

dubbed "Autonomy Day," Musk took to the stage and announced that Tesla vehicles would be

capable of full self-driving and that in two years the company would be making cars without

steering wheels or pedals.²⁹

38. In February 2020, the NTSB called on the National Highway Traffic Safety

Administration ("NHTSA") to set stricter standards on Autopilot, citing the high number of

Autopilot-related collisions and deaths.³⁰

²⁸ https://www.theverge.com/2020/2/25/21153320/tesla-autopilot-walter-huang-death-ntsb-probable-cause.

²⁹ R. Baldwin, "Tesla promises 'one million robo-taxis' in 2020," https://www.engadget.com/2019-04-22-teslaelon-musk-self-driving-robo-taxi.html (Apr. 22, 2019).

³⁰https://www.ntsb.gov/news/press-releases/Pages/NR20200225.aspx;

https://arstechnica.com/cars/2020/02/ntsb-blasts-tesla-caltrans-and-nhtsa-for-autopilot-death/.

- 39. In January 2021, Tesla reported \$721 million in profit in 2020, its first profitable year. This was a dramatic turnaround in the company's financial condition from prior recent years. As recently as 2018, Tesla had been burning through cash, was in danger of running out of money, and at one point was approximately only one month away from having to declare bankruptcy according to Elon Musk himself.³¹ However, if Elon Musk and Tesla had been honest with the public and consumers about disclosing the known defects of the Autopilot system, these massive profits would not have been realized.
- 40. In a January 2021 earnings call, Elon Musk stated that it "will become obvious later this year" that "Tesla Autopilot is capable of full self-driving." Mr. Musk also stated, "I'm highly confident the car will drive itself for the reliability in excess of a human this year. This is a very big deal." When a financial analyst asked Musk why he was confident Tesla would achieve Level 5 (full) autonomy in 2021, Musk responded, "I'm confident based on my understanding of the technical roadmap and the progress that we're making between each beta iteration."³²
- 41. Six weeks later, on a March 9, 2021 phone call with California DMV regulators, Tesla's director of Autopilot software, CJ Moore, contradicted Mr. Musk. According to an internal DMV memo memorializing the call (released via a Public Records Act request), "DMV asked CJ to address, from an engineering perspective, Elon's messaging about L5 [Level 5] capability by the end of the year. Elon's tweet does not match engineering reality per CJ." Mr. Moore's employment with Tesla ended shortly thereafter in 2021—after his initial deposition in this case.

³¹ See Chris Isidore, "Tesla just proved all its haters wrong. Here's how," CNN Business, https://www.cnn.com/2020/01/31/investing/tesla-cash-crunch/index.html (Jan. 31, 2020); Chris Isidore, "Elon Musk: Tesla was months away from bankruptcy," CNN Business, https://www.cnn.com/2020/11/04/tech/elon-musk-tesla-oncegot-near-bankruptcy/index.html (Nov. 4, 2020).

Tesla (TSLA) Q4 2020 Earnings Call Transcript (Jan. 27, 2021), available at https://www.fool.com/earnings/call-transcripts/2021/01/27/tesla-tsla-q4-2020-earnings-call-transcript/.

³³ Memorandum to File by Miguel Acosta (DMV) Re: Tesla AP City Streets Update (Mar. 9, 2021), available at https://www.plainsite.org/documents/28jcs0/california-dmv-tesla-robotaxi-ADAS-notes/.

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- 42. In June 2021, in what was widely seen as a response to motor vehicle collisions involving Tesla's ADAS technology, NHTSA issued an unprecedented order requiring automobile manufacturers to report any crash involving an injury, fatality, or property damage that happens while or immediately after a vehicle is automating some driving tasks.³⁴
- 43. In August 2021, NHTSA opened a preliminary safety defect investigation into Autopilot.³⁵ NHTSA's preliminary investigation was upgraded to an engineering analysis in June 2022, and its probe into Autopilot remains ongoing.³⁶

D. Testimony and Evidence from Tesla Employees

- 44. Plaintiff has deposed Tesla's corporate representative and several high-level engineers on Tesla's Autopilot team: Chris Payne, Richard Baverstock, Ashok Elluswamy, Milan Kovac, Adam (Nicklas) Gustafsson, and Andrej Karpathy. In these depositions, excerpts of which are attached to this motion, the Tesla deponents acknowledge known defects or "limitations" with the Autopilot system, and they identify Tesla's CEO, Elon Musk, as the final decisionmaker on Autopilot.
- 45. In the deposition of Tesla's then-corporate representative, Christopher [CJ] Moore, Plaintiff learned that Telsa's CEO, Elon Musk, is "hands-on," "very involved with the product's definition," and "very involved with making certain decisions around how things should work." (Deposition of CJ Moore, Exhibit B, pp. 14-16).³⁷ Mr. Moore's deposition was not completed, and

³⁵ https://www.consumerreports.org/cars/car-safety/nhtsa-expands-tesla-autopilot-investigation-a7977631326/

³⁴ https://www.nhtsa.gov/laws-regulations/standing-general-order-crash-reporting#:~:text=NHTSA%20issued%20the%20General%20Order,are%20free%20of%20defects%20that

³⁶ https://www.reuters.com/technology/us-agency-working-really-fast-nhtsa-autopilot-probe-2023-01-09/

³⁷ Rather than attaching this deposition (and Exhibits D, E, F, G, H, I, J), Plaintiff will rely on the redacted documents previously submitted to the Court along with its renewed motion to compel the deposition of Elon Musk, and the Plaintiff will submit unredacted copies to the Court under separate cover.

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the parties agreed to continue it at a future date. However, before that could be done, Mr. Moore's

employment with Tesla ended.

46. After Mr. Moore's departure, Tesla designated Eloy Rubio-Blanco as its corporate

representative. (Deposition of Eloy Rubio-Blanco attached as Exhibit C). In deposition, Mr.

Rubio-Blanco explained that he graduated from college in 2018—one year before the accident

involving Mr. Banner—and he did not join Tesla until March 2021—two years after the accident.

(Ex. C at 36:12-13, 39:17-19). Despite his apparent inexperience and recent hiring at Tesla, Mr.

Rubio-Blanco testified as to the purported "fleet learning" that Tesla was conducting with its

vehicles on public roadways from 2016 through 2019—the period leading up to Mr. Banner's

accident. (Ex. C. at 97:10-25, 135:1-13). Mr. Rubio-Blanco attempted to bolster Tesla's position

on Autopilot by relying on the product itself, claiming that Autopilot in Mr. Banner's Tesla was

not defective "[b]ecause the system signaled no fault alert or trauma code." (Ex. C at 152:11-23;

30:8-15). However, Mr. Rubio-Blanco admitted that after Mr. Banner's death, the Autopilot team

at Tesla began "boosting" the system to assist with cross-traffic and tractor-trailer scenarios in the

future. (Ex. C at pp. 184-88).

Next, the Plaintiff deposed Chris Payne, who investigated the fatal accident in this 47.

case. (Deposition of Chris Payne, Exhibit D, p. 14). Mr. Payne claimed the Autopilot system in

Mr. Banner's Tesla failed to consistently detect the tractor trailer prior to the collision and therefore

it failed to brake or engage in any deceleration. Three elements contributed to this failure: (1) low

lighting conditions at dawn, (2) the truck was perpendicular to Mr. Banner's Tesla, i.e., it was a

cross traffic scenario, and (3) Autopilot was optimized for objects with an aspect ratio closer to

1:1—not long objects like trucks or tractor trailers. (Ex. D. p. 59, 74-76, 78-79).

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48. Mr. Payne advised that at the time of the fatal accident, Tesla vehicles used a

combination of radar sensors and camera data to feed into the Autopilot system, which would then

fuse the data, plan the appropriate response for the vehicle, and act on it. (Ex. D, pp. 13, 44-45).

However, within the last year, all new Teslas switched to a camera/vision only system that Mr.

Payne claimed was "better technology." (Ex. D, pp. 13, 44-45, 89). Mr. Payne believed the new

Autopilot software was "absolutely improved," he agreed the "the probability of a severe collision

[would] be lower on current firmware," and he said it was "highly likely [a new Model 3] would

begin deceleration in this [same] scenario." (Ex. D, pp. 48, 79). In fact, Tesla purposely released

an OTA (over-the-air) update to its fleet after Mr. Banner's accident, so that Tesla vehicles would

respond better to situations involving a perpendicular truck. (Ex. D, pp. 88-89).

49. Mr. Payne admitted Tesla's Autopilot system was designed and released without

the ability to detect cross traffic. At the same time, Mr. Payne recognized cross traffic is part of

"daily driving," and the collision in this case resulted from cross traffic. (Ex. D, pp. 31-32, 59-61,

63). Despite its limitations, Autopilot was released to customers in "beta," which as Mr. Payne

explained indicates Autopilot is still being developed and tested on millions of Tesla vehicles,

Tesla consumers, and other non-Tesla drivers on public roads. (Ex. D, pp. 33, 36, 82). He did

however confirm that it is undisputed that Tesla made the decision to allow this defective Autopilot

system to be used on a roadway that Tesla knew would result in the product failing and customers

being injured or killed.

50. Mr. Payne did not know why Tesla made the decision to omit cross traffic detection

from Autopilot. (Ex. D, pp. 60-61). Mr. Payne also did not know who at Tesla made the decision

to omit cross traffic detection from Autopilot, or as he phrased it, to limit the scope of Autopilot.

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(Ex. D, pp. 61-63). In short, Mr. Payne did not know Tesla's motivations behind the design decisions for Autopilot or the person making those decisions.

- 51. Mr. Payne could only say that Autopilot was designed for use on highways with center dividers, and it was technically a "very hard thing" for the hardware and software to account for cross traffic. (Ex. D, pp. 61). Although Autopilot had nominal restrictions for highway use, agreed that Autopilot allowed itself to be used on roads that did not meet those restrictions:
 - Q. [C]ould the model 3 determine if it was a road that either met the restrictions that I just read or did not meet those restrictions. Is that a fair statement?
 - A. No. That is why we require the driver to be fully engaged. We do our best to ascertain whether we are in an appropriate operating regime.
 - Q. And so your testimony is that the road that [the decedent] was on met the criteria for the autopilot, the criteria that I just read?
 - A. That is not correct. My testimony is that the system does some checks that it is capable of doing; such as road class, such as whether there are lines.

And once those checks are passed, it is the responsibility of the user to then determine if you are in an appropriate operating machine at which point you can engage.

Q. And if he is on a road with cross traffic, the autosteer function will still operate. It won't stop even though [] it knows there's cross traffic, right?

[Defense counsel]: Objection to the form.

- A. It does not know that there's cross traffic.
- Q. So you are saying that the model 3 would not know if it was on a highway that did not have a center divider.

Is that what you are saying?

A. Let me just be specific.

Yes. So for something -- Knowing whether you have a center divider, it would use a combination of the map information and the vision detections to determine that.

And so it should know with a relatively high confidence whether it is divided or not.

The problem is the particular cross traffic itself.

And in this case, knowing that there's cross traffic or potential for cross traffic, the autopilot at the time was not designed to detect that.

Q. So if the autosteer determined that if the highway did not have a center divider, because it says here autosteer design for use on highways that have a center divider, so it was determined that it was on a highway that did not have a divider, it would still operate, right?

It would not turn off because it did not have a center divider, true?

A. You can activate it when there is objectively not a center divider, that is correct.

Q. Yes. Yes. So it would continue to operate?

A. You can operate it -- You can engage and operate autopilot if there's not a center divider and it will continue to operate.

(Ex. D, pp. 29-32). Mr. Payne acknowledged the Autopilot system could detect when road conditions were not appropriate for the use of Autopilot, and it was technically possible for Autopilot to disengage immediately when such a scenario occurred, but the system was designed to gradually disengage instead. (Ex. D, pp. 90-95).

52. Mr. Payné further noted that the Autopilot program had three to four directors. (Ex. D, pp. 8-9). The directors handled different aspects of Autopilot, and they reported directly to Elon Musk. (Ex, D, pp. 10-11). Although Mr. Payne was not a director, he admitted to meeting with Mr. Musk, and he agreed that "Elon is involved with the development of the autopilot system." (Ex. D, p. 11).

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like the auto windshield wipers. (Ex. E, p. 25).

admitted to meeting with Elon Musk "occasionally," even though he was not a director. (Deposition of Richard Baverstock, Exhibit E, p. 17-18). Mr. Baverstock said Mr. Musk would give "feedback, how he would like the customer experience, the overall performance, and directions the feature could head in for future options." (Ex. E, p. 18). Although Mr. Baverstock would not agree that every change to Tesla vehicles were approved by Mr. Musk, Mr. Baverstock was unaware of any change in his area of Autopilot—specifically Autosteer—being made without Mr. Musk's approval. (Ex. E, p. 19). Mr. Baverstock further stated that "almost everything" he did at Tesla was done at the request of "Elon." (Ex. E, p. 24). In fact, Mr. Musk was so personally involved in the operations at Tesla that he requested Mr. Baverstock to work on apparent minutia

Plaintiff next deposed Ashok Elluswamy, an engineer on the Autopilot team who also served as a director at Tesla. (Deposition of Ashok Elluswamy, Exhibit F, p.6). In his capacity as a director, Mr. Elluswamy reported directly to Elon Musk, and he met with Mr. Musk once a week. (Ex. F, p. 9). During his meetings with Mr. Musk, Mr. Elluswamy said they would discuss "the status of the autopilot development," and Mr. Elluswamy would "get any inputs that [Mr. Musk] might have." (Ex. F, p. 9). Mr. Elluswamy further noted that Mr. Musk knew how the Autopilot system worked, and Mr. Musk "set[] milestones and deadlines for the team." (Ex. F, p. 10). During Autopilot meetings with Mr. Musk, other directors would be present, including Andrej Karpathy and Milan Kovac. (Ex. F, p. 10-11). When asked who was in charge of the Autopilot program and who made the final decisions on Autopilot, Mr. Elluswamy answered: "The only thing I say is Elon Musk is CEO of the company." (Ex. F, p. 12).

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55. Notably, Mr. Elluswamy was not aware of any decision concerning the

development of Autopilot where Elon Musk and the directors disagreed. (Ex. F, p. 13). Mr.

Elluswamy essentially claimed that if there was a disagreement, then Mr. Musk would talk to the

directors and the disagreement would somehow be resolved:

I don't think anyone would in the end disagree. Like, there would be further

discussions including Elon Musk and then we value the opinions further and then

we take the position that's best for the product and the company in the end.

(Ex. F, p. 13). Mr. Elluswamy did not recall talking with Mr. Musk about the crash in the instant

case, but Mr. Elluswamy admitted that he became more involved in Autopilot's detection of cross-

traffic between 2020 and 2021—in the aftermath of Plaintiff's accident. (Ex. F, p. 19, 90).

56. Plaintiff also deposed two other directors of the Autopilot program: Andrej

Karpathy and Milan Kovac. In relevant part, Mr. Karpathy testified he met with Elon Musk and

the rest of the Autopilot team once a week. (Deposition of Andrej Karpathy, Exhibit G, p. 11).

Although Mr. Karpathy claimed the directors were in charge of Autopilot, he conceded they

reported to Mr. Musk. (Ex. G, p. 33). Mr. Karpathy further admitted that Mr. Musk was personally

involved in discussing which Autopilot updates should be released, and he did not know of a single

update that Mr. Musk disapproved. (Ex. G, p. 33). And as noted above, Mr. Karpathy testified that

Mr. Musk personally tested some of the Autopilot development builds by driving his own vehicle

and then by providing feedback after the fact. (Ex. G, p. 105).

57. Milan Kovac, who was the third Autopilot director, testified there was no

intermediary between him and Elon Musk. (Deposition of Milan Kovac, Exhibit H, p. 12). Mr.

Kovac explained that in Autopilot meetings, Mr. Musk provided feedback on technical challenges

and engineering progress and then Mr. Musk "would tell us what he thinks about what we're doing

and . . . where it's headed toward." (Ex. H, p. 21). Notably, Mr. Kovac said that Mr. Musk was

"more involved than others for some of the [Autopilot] updates," and that if the Autopilot team was unsure of something then they would seek Mr. Musk's "guidance." (Ex. H, p. 29).

- 58. Finally, Adam (Nicklas) Gustafsson testified he was a systems engineer on the Autopilot team, specifically working on the automatic emergency braking and forward collision warning features. (Deposition of Adam Gustafsson, Exhibit I, p. 8). On behalf of Tesla, Mr. Gustafsson investigated the accident in this case (the Banner crash), and he reviewed the video and NTSB report. (Ex. I, p. 12-13, 25, 27). Mr. Gustafsson agreed that Autopilot in Mr. Banner's Tesla did not activate automatic emergency braking or forward collision warning before the accident in this case, but he said those systems were not designed to respond to cross-traffic. (Ex. I, p. 43). Mr. Gustafsson also investigated a similar Tesla Autopilot accident involving crosstraffic—the Williston crash involving Mr. Brown—that occurred years before the Banner crash. (Ex. I, pp. 13-15). Nevertheless, Mr. Gustafsson admitted that in almost three years, no changes were made to Autopilot's systems to account for cross-traffic. (Ex. I, p. 40). Most importantly, Mr. Gustafsson did not deny that the Autopilot team had a meeting after the crash in this case, or that Mr. Musk was for present for it; Mr. Gustafsson only said he did not recall. (Ex. I, p. 33).
- Plaintiff also is in possession of internal Tesla emails and other documents that 59. demonstrate Elon Musk is the de facto leader of the Autopilot team, he personally tests versions or builds of Autopilot himself, and he initiates requests to fix technological issues or defects with Autopilot. (Tesla documents, Exhibit J).
- Based on the forgoing documents, Elon Musk's own public statements about 60. Autopilot, and the testimony of multiple high-level directors and engineers at Tesla demonstrating Elon Musk's unique personal knowledge of and direct participation in the development of Autopilot—Plaintiff moved to compel the deposition of Mr. Musk as Tesla's CEO.

After extensive briefing and argument, this Court denied Plaintiff's initial motion to compel and an amended motion to compel.

E. The Opinion of Dr. Cummings, Plaintiff's Expert Witness

- 61. Plaintiff has retained Mary (Missy) Cummings, PhD., as an expert in the area of human-unmanned vehicle interaction, human-autonomous system collaboration, human-system engineering, autonomous design, system elements, driver monitoring systems, autonomous driver sensor systems, design criteria, and design testing for autonomous systems.
- 62. Dr. Cummings' extensive background is set forth in her affidavit, which is attached as Exhibit K. However, for the benefit of the Court, Plaintiff briefly notes that between November 2021 through December 2022, Dr. Cummings was appointed by President Joe Biden as the senior safety advisor at the National Highway Traffic Safety Administration (NHSTA). (Ex. K). Dr. Cummings is currently a professor at George Mason University in the Departments of Mechanical Engineering, Electrical and Computer Engineering, and Computer Science. (Ex. K).
- 63. After reviewing all the evidence obtained in discovery, which is set forth in detail in her affidavit, Dr. Cummings concluded, "within a reasonable degree of engineering certainty . . . that Tesla is guilty of intentional misconduct and gross negligence in causing the death of Jeremy Banner in the subject crash." (Ex. K, p. 3-4).
- 64. To support her opinion, Dr. Cummings cited the following misconduct on the part of Tesla:
 - a. Allowing the Autopilot system to be used outside of Tesla's stated operational design domain (ODD), on roadways with cross-traffic;
 - b. Allowing the Autopilot system to be used in excess of the posted speed limit on roadways with cross-traffic;

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- c. Making public statements that its Autopilot technology is far more capable than it actually is;
- d. Relying on radar to detect crossing traffic despite established history of underride crashes and concerns raised internally within Tesla;
- e. Failing to re-train its computer vision dataset to include broadside trucks despite Tesla's knowledge of a previous death involving Tesla's autopilot and a broadside semi-truck
- f. Failing to "label-boost"/VIP status images of broadside trucks despite Tesla's knowledge of a previous death involving Tesla's autopilot and a broadside semi-truck.
- g. Failing to re-train its computer vision dataset to include different lighting conditions;
- h. Allowing drivers of its vehicles, while autopilot is engaged, to take hands off [the] steering wheel for 30 seconds or more despite Tesla claiming its autopilot system is a level 2 system which requires drivers to be ready to take immediate action;
- i. Failing to provide adequate warnings in the owner's manual that the autopilot system has problems detecting crossing traffic;
- j. Failing to follow recommendations of Continental's testing recommendation which warned Tesla of the limitations of detecting crossing traffic;
- k. Failing to conduct adequate testing of both its radar and computer vision systems;
- 1. Failing to adequately train senior Tesla engineers and employees on basic information such as ODD and the need for consideration of human factors when designing and implanting its autopilot system;
- m. Failing to use cameras to detect inattention of the driver;
- n. Failing to utilize human factors expertise and/or human factors consultants in the design and creation of its warnings and user-interface;
- o. Failing to conduct testing to determine adequate perception/reaction times of the autopilot system;

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p. Failing to provide adequate supervision and quality assurance of subcontractors involved with the autopilot system;

q. Denying that misuse of its autopilot system is a potential hazard;

r. Failing to alert drivers while engaged in autopilot that the Tesla vehicle is no longer in Tesla's designated ODD;

s. Failing to keep with known standards;

t. Failing to use reasonable care and practical engineering princip[les] under all the relevant circumstances.

(Ex. K, p. 4-5).

In addition to the foregoing, Dr. Cummings determined that "Tesla had actual 65. knowledge of the wrongfulness of its conduct and the high probability that injury or death to Jeremy Banner, and other Tesla drivers so similarly situated in addition to members of the general public on the roadway, would result . . . in Jeremy Banner's death." (Ex. K).

As a result, Dr. Cummings concluded that Tesla acted with conscious disregard or 66. indifference to the life, safety, or rights of Mr. Banner, and that Tesla's intentional misconduct and gross negligence caused Mr. Banner's death. (Ex. K).

After Dr. Cummings submitted her updated opinions, Tesla had an opportunity to 67. re-depose her and test her opinions. (Deposition of Dr. Cummings, attached as Exhibit L). In relevant part, Dr. Cummings testified in accordance with her affidavit, stating that Tesla committed intentional misconduct by making public statements claiming that Autopilot was far more capable than it actually is. (Ex. L at 36:16-21). Dr. Cummings distinguished Tesla's public statements from the one-time statement that appears on a Tesla vehicle's screen the first time that Autopilot is enabled, explaining that "[n]o one ever reads . . . the end-user license agreements, people just accept, accept, and accept." (Ex. L at 41:5-19). Dr. Cummings asserted that the one-time statement

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in the car was "a very long statement, and a very wordy statement that is not being truly understood.

(Ex. L at 45:2-5).

68. In contrast, Dr. Cummings said the public statements made by Elon Musk—for

example when he went on "'60 Minutes' and show[ed] everybody how you can drive hands-

free"—were more significant. (Ex. L at 43:14-19). Dr. Cummings further noted that "Elon Musk

t[old] his engineers to fake a video that goes viral on the Internet to make a car look like it's driving

around the city and they faked the test and they faked the video." (Ex. L at 45:20-22, 46:1). Dr.

Cummings continued: "[I]t's confusing for drivers if they're seeing Elon Musk driving with no

hands on, they're seeing videos on the Internet with no one, with people driving with no hands on,

they see that and then they don't read this [the end user agreement]." (Ex. L at 13-17).

69. If Tesla wanted its drivers to truly keep their hands on the wheel, Dr. Cummings

explained that Tesla would have "put some technology in the car to actually keep people's hands

on the wheel []." (Ex. L at 48:20-22). If Tesla was "serious about safety" then Dr. Cummings said

it "would not allow autopilot to operate in domains where it is not qualified to operate." (Ex. L at

49:14-17). Taking the perspective of a consumer, Dr. Cummings noted: "[I]f you're seeing the

CEO [Elon Musk] on television and on the Internet not using his hands and you're seeing

advertisements about just how much the car can drive without hands on the steering wheel, I do

think it becomes very confusing." (Ex. L at 52:20-22, 53:1-2). In short, Dr. Cummings said that

Tesla did a "wink . . . and a nod" with what it advertised and what it put in its manual. (Ex. L at

53:18-20).

70. Dr. Cummings also claimed that Tesla "encourages you to sometimes be hands-

free" because Tesla advises owners that "if they take their hands off, they will eventually be

notified and indeed they get three strikes before the system intervenes." (Ex. L at 55:9-15), Dr.

Cummings further noted the inconsistences between Tesla's on-screen warning for traffic-aware cruise control and auto-steer, explaining, "[a]nd so, again, you're recommending to a driver who is not a trained expert driver, not a test driver, to all of a sudden start managing significant different messages that have, that seem to be counter to one another." (Ex. L at 59:3-7). And although Tesla's warning gave a "clear statement of the operational design, domain, that autopilot does not work in," Dr. Cummings said that "beg[ged] the question why you would even allow people to drive in autopilot in a scenario where you know it's not capable." (Ex. L at 62:4-8). According to Dr. Cummings, "[i]t is curious why it is allowed to be operated . . . hands-free if the requirement is to keep your hands on." (Ex. L at 63:17-20). And in contrast to other auto manufacturers like Mercedes, which warned that their technology would not brake for cross-traffic, Tesla's manual only stated it "may not" brake for cross-traffic. (Ex, L at 81:11-21).

- 71. Finally, Dr. Cummings explained how Tesla was grossly negligent for denying that misuse of its Autopilot system was a potential hazard:
 - [I] believe that a company that has one accident where a human is killed with a truck under run in 2016, then refuses to do anything, including updating the neural nets, conducting more testing, even trying to change warnings in their owner's manuals, yes, I would, I think that constitutes an implicit denial that there is a problem.

The fact that Teslas keep hitting first responder vehicles and hitting vehicles broad side would be an illustration that your mitigations are not effective.

. . . .

I would agree that all the lists of supposed interventions that you just listed, they were there before Jeremy Banner died and they are still there after Jeremy Banner died and nothing has changed, they did not change after the Williston accident, so if Tesla were a serious company about owner safety, I think [] they would have done more to address what continues to be a very serious problem.

(Ex. L at 109:20-22, 110:1-5, 112:20-22, 113:1, 113:19-22, 114:1-5).

III. MEMORANDUM OF LAW

A. Standard for Amending Complaint to Assert Punitive Damages

"Florida law requires the plaintiff to seek the trial court's permission before adding punitive damages to its complaint." Werner Enterprises, Inc. v. Mendez, 362 So. 3d 278, 281 (Fla. 5th DCA 2023). Section 768.72, which authorizes and governs punitive damages, provides that a plaintiff "may move to amend her or his complaint to assert a claim for punitive damages as allowed by the rules of civil procedure." § 768.72(1), Fla. Stat. The statute further states that these rules "shall be liberally construed so as to allow the claimant discovery of evidence which appears reasonably calculated to lead to admissible evidence on the issue of punitive damages." § 768.72(1), Fla. Stat. Although there are more requirements to pleading a claim for punitive damages than amending under rule 1.190(a), the standard is far from insurmountable.

To state a claim for punitive damages, the plaintiff must make "a reasonable showing by evidence in the record or proffered by the claimant which would provide a reasonable basis for recovery of such damages." § 768.72(1), Fla. Stat.; see also Fla. R. Civ. P. 1.190(f). In short, the plaintiff merely has to show that there is a reasonable basis that a defendant acted with gross negligence or engaged in intentional misconduct. See W.R. Grace & Co.--Conn. v. Waters, 638 So. 2d 502, 503 (Fla. 1994) (holding that punitive damages appropriate when a defendant acts "with such gross negligence as to indicate a wanton disregard for the rights of others"); see ER Truck & Equipment Corp. v. Gomont, 300 So.3d 1230, 1231 (Fla. 3d DCA 2020).

At the pleading stage, the plaintiff does not need to prove entitlement to punitive damages. See Deaterly v. Jacobson, 313 So. 3d 798, 801 (Fla. 2d DCA 2021) ("Subsection (1) does not mandate that a trial court require a claimant to prove the entitlement to punitive damages by clear and convincing evidence at the pleading stage."). It is only when a claim for punitive damages proceeds to trial, that the "trier of fact" may hold a defendant liable for punitive damages if the jury finds by "clear and convincing evidence . . . that the defendant was personally guilty of intentional misconduct or gross negligence." § 768.72(2), Fla. Stat. "Whether the plaintiffs are entitled to punitive damages must be left to the jury to decide once there is any evidence to show an entitlement to such an award. Even if the court is of the opinion that the preponderance of the evidence is against the plaintiff], it should be left to the jury to decide." Otey v. Florida Power & Light Co., 400 So. 2d 1289, 1291 (Fla. 5th DCA 1981).

Because the Plaintiff merely seeks to amend the complaint, the level of proof required at this preliminary stage of the proceedings is lower than that required for other prejudgment motions. "The conventional analysis utilized in resolving a summary judgment motion has no application in the context of a punitive damages determination under section 768.72." Noack v. Blue Cross and Blue Shield of Fla., Inc., 872 So. 2d 370, 371 (Fla. 1st DCA 2004). The matter is resolved by applying a standard that is akin to a motion to dismiss standard. See Holmes v. Bridgestone/Firestone, Inc., 891 So. 2d 1188, 1191 (Fla. 4th DCA 2005). Accordingly, the proffer and/or record evidence are viewed in a light most favorable to the plaintiff and must be accepted as true. See Estate of Despain v. Avante Group, Inc., 900 So. 2d 637, 642-44 (Fla. 5th DCA 2005). To decide if the plaintiff has made a reasonable showing for recovering punitive damages, the trial court simply "asks 'whether a reasonable jury could infer' from the proffer that the defendant's conduct satisfies the statutory criteria for punitive damages." Werner Enterprises, Inc. v. Mendez, 362 So. 3d 278, 282 (Fla. 5th DCA 2023) (citation omitted).

As used in section 768.72, "[i]ntentional misconduct" means that the defendant had actual knowledge of the wrongfulness of the conduct and the high probability that injury or damage to the claimant would result and, despite that knowledge, intentionally pursued that course of conduct, resulting in injury or damage." § 768.72(2)(a), Fla. Stat. In contrast, "[g]ross negligence' means that the defendant's conduct was so reckless or wanting in care that it constituted a conscious disregard or indifference to the life, safety, or rights of persons exposed to such conduct." § 768.72(2)(b), Fla. Stat.

Florida's seminal case on punitive damages is *Carraway v. Rewell*, 116 So. 2d 16 (Fla. 1959). In *Carraway*, the Florida Supreme Court elaborated on the standard as follows:

The character of negligence necessary to sustain an award of punitive damages must be of a gross and flagrant character, evidencing reckless disregard of human life, or of the safety or persons exposed to its dangerous effects, or there is that entire want of care which would raise the presumption of a conscious indifference to consequences, or which shows wantonness or recklessness, or a grossly careless disregard of the safety and welfare of the public, or that reckless indifference to the rights of others which is equivalent to an intentional violation of them.

Id. at 20. Of course, the standard for punitive damages has now been codified in section 768.72, as noted above.

Section 768.72 provides that "[i]n the case of an employer, principal, corporation, or other legal entity, punitive damages may be imposed for the conduct of an employee or agent only if the conduct of the employee or agent" is guilty of intentional misconduct or gross negligence, and:

- (a) The employer, principal, corporation, or other legal entity actively and knowingly participated in such conduct;
- (b) The officers, directors, or managers of the employer, principal, corporation, or other legal entity knowingly condoned, ratified, or consented to such conduct; or

(c) The employer, principal, corporation, or other legal entity engaged in conduct that constituted gross negligence and that contributed to the loss, damages, or injury suffered by the claimant.

§ 768.72(3), Fla. Stat. Although a corporate defendant may be held vicariously liable for punitive damages, that is not the exclusive theory of recovery, and the plaintiff does not have to allege misconduct of any particular employee or agent. *Event Depot Corp. v. Frank*, 269 So. 3d 559, 562 (Fla. 4th DCA 2019); *see Mercury Motors Express, Inc. v. Smith*, 393 So. 2d 545, 549 (Fla. 1981); *Est. of Despain v. Avante Grp., Inc.*, 900 So. 2d 637, 640 (Fla. 5th DCA 2005) ("A corporate employer, like an individual employer, may be held liable for punitive damages based on the legal theories of either direct or vicarious liability."). Rather, a plaintiff may seek punitive damages against a corporate defendant by alleging the corporation placed a defective product into the stream of commerce. *Frank*, 269 So. 3d at 562. "This supports a punitive damages claim against the corporation under section 768.72(3)(c), Florida Statutes." *Id*.

If Plaintiff's proffer provides a reasonable showing of intentional misconduct or gross negligence under section 768.72, then the Court should grant this motion without weighing the evidence. See Dolphin Cove Ass'n v. Square D. Co., 616 So. 2d 553, 553 (Fla. 2d DCA 1993) ("Prejudging the evidence is not a proper vehicle for the court's denial of the motion to amend."). In addition, section 768.72 does not require the submission of evidence that would be admissible at trial. It requires only an evidentiary "proffer."

[A] 'proffer' according to traditional notions of the term, connotes merely an 'offer' of evidence and neither the term standing alone nor the statute itself calls for an adjudication of the underlying veracity of that which is submitted, much less for countervailing evidentiary submissions. Therefore, a proffer "is merely a representation of what evidence the [party] proposes to present and is not actual evidence."

[A]n evidentiary hearing where witnesses testify and evidence is offered and scrutinized under the pertinent evidentiary rules,

as in a trial, is neither contemplated nor mandated by the statute

in order to determine whether a reasonable basis has been established

to plead punitive damages.

Estate of Despain v. Avante Group, Inc., 900 So. 2d 637, 642 (Fla. 5th DCA 2005) (emphasis added).

An evidentiary hearing is not required. See Solus v. Calvo, 689 So. 2d 366 (Fla. 3d DCA 1997);

Strasser v. Yalamanchi, 677 So. 2d 22 (Fla. 4th DCA 1996).

Plaintiff acknowledges that the Florida Supreme Court recently amended Florida Rule of

Appellate Procedure 9.130 to authorize appeals of nonfinal orders on motions for leave to amend

to assert a claim for punitive damages. See In re Amend. to Fla. R. of App. P. 9.130, 345 So. 3d

725, 725-26 (Fla. 2022). Previously, district courts could review orders granting leave to amend

to assert punitive damages only on a petition for writ of certiorari. However, nothing about the

change in review mechanism alters the standard to be applied by this Court. See Werner

Enterprises, Inc. v. Mendez, 362 So. 3d 278, 284 (Fla. 5th DCA 2023) (reversing trial court order

that denied leave to amend "[b]ecause [the plaintiff] made a 'reasonable showing' of having a

'reasonable basis' for the recovery of punitive damages"). Indeed, section 768.72—the statute

setting forth the standard for punitive damages—has remained unchanged since 1999. See Ch. 99-

225, Laws of Fla., § 22.

Finally, Plaintiff notes that in Turner v. PCR, Inc., 754 So. 2d 683 (Fla. 2000), the Supreme

Court of Florida allowed affidavits of experts to establish the type of conduct, which if proven,

would justify an award of punitive damages. And in Payton Health Care v. Estate of Campbell,

497 So. 2d 1233 (Fla. 2d DCA 1986), the Second District Court of Appeal held that even with

conflicting evidence, "the evidence was sufficient to sustain the award of punitive damages"

because plaintiff's expert witness testified that defendant's conduct constituted "an outrageous

deviation from the acceptable standard." Id. at 1240. In other words, expert witness affidavits are

sufficient to establish a reasonable basis for an amendment to assert punitive damages.

B. Punitive Damages in this Case

In this case, Plaintiff has proffered evidence showing that Tesla itself had actual notice that

Autopilot was defective, had actual notice of a prior similar, fatal accident in 2016 with a tractor-

trailer that was caused by this same defect, had the technology to fix the product defect by label

boosting and re-training Autopilot, and nevertheless chose to do nothing about the product defect,

which resulted in Mr. Banner's death in 2019. Furthermore, Tesla was warned by federal government

agencies that its Autopilot system should not be allowed to be used on roadways with cross-traffic

due to known defects which could result in injury or death. It is undisputed that Mr. Banner's accident

occurred on exactly such a roadway with cross-traffic. Had Tesla listened to these warnings, the

defective system would not have been in use and Mr. Banner would be alive today.

Thus, Tesla knew that the defect would cause life threatening injuries and acted with

conscious disregard to Mr. Banner's safety, and the safety of the public, by misrepresenting the

capabilities of Autopilot and by releasing Autopilot software which was not adequately tested for

safety. The evidence proffered by Plaintiff shows that this was a cynical decision made by Tesla's

CEO, Elon Musk, to improve the company's financial fortunes at the expense of consumer safety.

Accordingly, Plaintiff submits she has met the "reasonable showing" standard to assert a claim for

punitive damages.

"A legal basis for punitive damages is established in products liability cases where the

manufacturer is shown to have knowledge that its product is inherently dangerous to persons or

property and that its continued use is likely to cause injury or death, but nevertheless continues to

market the product without making feasible modifications to eliminate the danger or making adequate

disclosure and warning of such danger." Johns-Manville Sales Corp. v. Janssens, 463 So. 2d 242, 249

(Fla. 5th DCA 1984), disapproved on other grounds, Chrysler Corp. v. Wolmer, 499 So. 2d 823, 826

(Fla.1986). This is especially true "when the evidence is susceptible to the inference that the

manufacturer not only refused to warn for the user's protection, but intentionally took steps to cover

up the known danger in order to protect continued marketing of the product for its own economic

advantage." Id. In Johns-Manville Sales Corp., the court found that the defendant had enough prior

knowledge that asbestos caused significant injury and sickness for a jury to reach the punitive

damages verdict that it did. See id., 463 So. 2d at 249. The court also found that the jury could

conclude that the defendant failed to warn or to make feasible modifications to its product.

Here, Tesla had prior notice of the defect in its Autopilot system stemming from the Joshua Brown accident, which occurred in 2016—almost three years before Plaintiff's accident. See Estate

of Despain v. Avante Group, Inc., 900 So. 2d 637, 644-45 (Fla. 5th DCA 2005) (reversible error to

deny leave to add punitive damages where the evidence showed that a nursing home was on notice of

risk to plaintiff, and only attempted to remedy the situation after it was too late); Otev v. Florida

Power & Light Co., 400 So. 2d 1289, 1291 (Fla. 5th DCA 1981) (trial court erred in not submitting

punitive damages issue to jury where evidence showed that defendant knew of the hazard of

electrocution, due to prior incidents, but failed to make property safe); Although Tesla claimed in

September 2016 that it had fixed the issue, Tesla clearly did not address the defect despite the fact

that its Autopilot engineers admitted that it had the ability to label boost and train the Autopilot—

steps that Tesla eventually took after Plaintiff's accident. Plaintiff's expert, Dr. Cummings, has

supported Plaintiff's assertion that Tesla is guilty of intentional misconduct and gross negligence not

only because Tesla failed to adequate test and train Autopilot (despite knowledge of Joshua Brown's

death), but also because Tesla allowed Autopilot to be used outside its operational design domain, and made public statements that Autopilot technology is far more capable than it actually is. (Ex. J).

Plaintiff notes that the imposition of punitive damages against auto manufacturers, when their conduct warrants it, is well-established and is far from extraordinary. "[P]unitive damages are allowed where the defendant had knowledge of a dangerous condition and chose not to remedy the condition." *American Motors Corp. v. Ellis*, 403 So. 2d 459, 468 (Fla. 5th DCA 1981); *see Toyota Motor Co., Ltd. v. Moll*, 438 So. 2d 192 (Fla. 4th DCA 1983). Additionally, evidence of "concealment of offensive conduct after it initially occurred is indicative of malice or evil intent sufficient to support punitive damages." *Gen. Motors Corp. v. McGee*, 837 So. 2d 1010, 1035 (Fla. 4th DCA 2002). In this case, the only thing that would be unusual would be to allow Tesla to be excused from the same standards that every state applies to all other automakers.³⁸

Accordingly, Plaintiff submits that this Court should grant the motion to amend based on General Motors Corp. v. McGee, 837 So. 2d 1010 (Fla. 4th DCA 2002), and the other cases discussed below. In McGee, the plaintiffs were driving an Oldsmobile station wagon when they were involved

³⁸ See Clark v. Chrysler Corp., 436 F.3d.594, 601 (6th Cir. 2006) (finding there was sufficient evidence to support punitive damages where "Chrysler utilized a thin piece of formed sheet metal as a B-pillar; that the truck's "unboxed" Bpillar design was inadequate to withstand low-impact accidents; that the sheet metal type of B-pillar was substantially outdated"); Ford Motor Co. v. Sasser, 618 S.E.2d 47 (Ga. Ct. App. 2005) (finding punitive damages were warranted where manufacturer experienced numerous problems with safety latch system in pre-production models, manufacturer did not run any tests on vehicles in which back seat was unlatched, vehicle was launched with problem unresolved, there were extensive complaints from customers after vehicle was released, and even though manufacturer was aware of problem, it chose not to send warning to consumers or to adopt system that would alert drivers when backseat was unlatched); Romo v. Ford Motor Co., 6 Cal. Rptr. 3d 793, 806 (Cal. App. Ct. 2003) (finding that punitive damages were warranted because "not only did Ford 'willfully and consciously ignore] the dangers to human life inherent in the 1978 Bronco as designed, resulting in the deaths of three persons'... it also ignored its own internal safety standards, created a false appearance of the presence of an integral roll-bar, and declined to test the strength of the roof before placing it in production."); Ford Motor Co. v. Ammerman, 705 N.E.2d 539 (Ind. Ct. App. 1999) (finding punitive damages were warranted where manufacturer, motivated by profit, intentionally placed automobile in stream of commerce knowing that it was highly prone to rollover accidents and defective and very dangerous); Oberg v. Honda Motor Co., 888 P.2d 8, 13 (Ore. 1995) (finding punitive damages were warranted when "[e]vidence was presented that defendants actually knew, or should have known, for many years before developing the ATV model that injured plaintiff, that their ATVs were highly likely to cause serious personal injury or death.").

in an accident with another vehicle that was pulling a homemade trailer. Although the collision with

the trailer was minor, the trailer had "pierced the station wagon's gas tank, causing the tank to leak

fuel, ignite, and explode." Id. at 1015. The surviving plaintiffs ultimately "sought punitive damages

on the ground that GM had 'actual knowledge' that it had marketed 'an inherently dangerous

automobile." Id. at 1017. They also "argued that GM did not provide adequate safety measures on

fuel systems because the fire-related deaths did not cost the company enough per vehicle to justify

any added expense for safety." Id. The plaintiffs relied on an internal report prepared by a GM

engineer concluding that "fatalities related to accidents with fuel fed fires [were] costing General

Motors \$2.40 per automobile in current operation." *Id.* at 1021, 1035. On appeal, the Fourth District

Court of Appeal concluded that it was permissible for plaintiffs to seek punitive damages by, among

other things, arguing that GM had concealed the significance of the internal report for years. Id. at

1035. And just as GM was aware in McGee, Tesla was well-aware of internal concerns regarding the

technological deficiencies of Autopilot and the misleading marketing of its capabilities.

In Holmes v. Bridgestone/Firestone, Inc., 891 So. 2d 1188 (Fla. 4th DCA 2005), the plaintiffs

sought to amend their complaint to seek punitive damages by presenting chronology from a consumer

advocacy website as well as copies of letters and memos on the tire manufacturer's letterhead,

suggesting that the tire manufacturer knew about tread separation problem, but delayed warning the

public in order to protect its own financial interests. *Id.* at 1190-92. Although the trial court initially

found this evidence insufficient and denied the motion to amend, the Fourth District Court reversed

on appeal, finding that the proffered evidence supported punitive damages and the amendment should

have been permitted. Id. at 1192. The public timeline of events in this case, combined with the

testimonial and documentary evidence from Tesla employees are more compelling than those present

in Holmes. Thus, this Court should grant Plaintiff's motion to amend.

Tesla's misconduct also resembles that of the defendant in Toyota Motor Co. v. Moll, 438 So. 2d 192, 194 (Fla. 4th DCA 1983). Both here and in Toyota Motor Co, the automaker defendant had prior knowledge of defects in their vehicles, but did nothing about it and continued selling the defective product. In Toyota Motor Co., Toyota knew that flange mounted fuel tanks, used by several models of vehicles were inherently dangerous but chose not to change the design in the model of the vehicle plaintiffs operated. Here, Tesla knew that deficiencies in its Autopilot software in Joshua Brown's Model S caused an accident with a tractor-trailer in 2016. Tesla had

the capability to modify Autopilot and make it safe, but Tesla chose to do nothing about the issue

except for continuing to release the same defective Autopilot software in other models utilizing

the technology like Mr. Banner's Model 3. Because the court in Toyota Motor Co. found the

punitive damages claim to be appropriate to go before the jury under similar circumstances, the

Court in this case should reach the same conclusion.

In Owens-Corning Fiberglass Corp. v. Ballard, 749 So.2d 483 (Fla. 1999), the court explained that it is the proper role of the jury to determine entitlement to punitive damages. In that case, the evidence showed the defendant corporation was informed that its product caused cancer, and the defendant refused to discontinue the product or switch to a less injurious product. Based on this evidence of the defendant's apparent indifference to the health and safety of those persons, including the plaintiff, who used the product at issue, the appellate court found that punitive damages were appropriately awarded. Id. at 488-89. In this case, the proffered evidence shows that Tesla refused to discontinue or to modify its Autopilot product with safety improvements which Tesla knew to be necessary and were available to it. Despite this knowledge, Tesla sat silent and chose profits over people.

To the extent Tesla argues it is prejudiced by the timing of this motion, that argument is meritless. In Burr v. Norris, 667 So. 2d 424 (Fla. 2d DCA 1996), the appellate court found that the plaintiff should have been permitted to amend his complaint to include a claim for punitive damages one month before trial. Id. at 426. And although the appellate court in Lasar Manufacturing Company, Inc., v. Bachanov, 436 So. 2d 236 (Fla. 3d DCA 1983), held it was error for the trial court to allow plaintiffs to seek punitive damages halfway through a trial, the appellate court also held that the plaintiffs "should be given leave to amend their complaint, if they so desire, to include a prayer for punitive damages" on remand. Id. at 238.

Again, the proper role of this Court is not to prejudge the evidence proffered by Plaintiff. See Dolphin Cove Ass'n, 616 So. 2d at 553. After viewing the proffer in a light most favorable to Plaintiff, a reasonable jury could find that Tesla committed intentional misconduct or gross negligence. See Werner Enterprises, Inc. v. Mendez, 362 So. 3d 278, 282 (Fla. 5th DCA 2023). Because the Plaintiff has made a "reasonable showing" of having a "reasonable basis" for the recovery of punitive damages, this Court should grant this motion and permit Plaintiff to amend the complaint to assert a claim for punitive damages. Id. at 284.

To do otherwise would be error. See Werner Enterprises, Inc., 362 So. 3d at 284 ("This is not to suggest that a jury will ultimately find for [plaintiff] on these issues. We merely hold that a reasonable jury could credit the proffered evidence as demonstrating Appellees' intentional misconduct and/or gross negligence."); see also Holmes v. Bridgestone/Firestone, Inc., 891 So. 2d 1188, 1191-92 (Fla. 4th DCA 2005) (holding plaintiff made "a reasonable showing under the statute, and the amendment should have been permitted"); Est. of Despain v. Avante Grp., Inc., 900 So. 2d 637, 645 (Fla. 5th DCA 2005) (reversing denial of motion to amend complaint to assert punitive damages).

CONCLUSION

The Plaintiff has proffered a reasonable showing of evidence to support the filing of the Amended Complaint, attached as Exhibit A, to assert a claim for punitive damages. There is evidence in the record that the Defendant Tesla engaged in intentional misconduct and/or gross negligence for selling a vehicle with an Autopilot system which Tesla knew to be defective and knew to have caused a prior fatal accident. Based on the proffered evidence and the cases cited above, the Plaintiff has satisfied the standard set forth by section 768.72, Florida Statutes.

WHEREFORE, the Plaintiff respectfully requests that this Honorable Court grants this motion to amend and accepts the Second Amended Complaint, Exhibit A, as filed.

CERTIFICATE OF SERVICE

WE HEREBY CERTIFY that on the 11th day of August, 2023, the foregoing document is being served in the manner specified by Rule 2.516 or in some other authorized manner for those counsel or parties who are not authorized to receive service by electronic mail consistent with Rule 2.516(b)(2).

/s/Lake H. Lytal, III.

LAKE H. LYTAL, III., ESQUIRE

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IN THE CIRCUIT COURT OF THE 15TH JUDICIAL CIRCUIT IN AND FOR PALM BEACH COUNTY, FLORIDA

KIM BANNER, as Personal Representative of the ESTATE OF JEREMY BANNER, deceased,

CASE NO.: 50-2019-CA-009962 (AB)

Plaintiff,

ν.

TESLA, INC. a/k/a TESLA FLORIDA, INC.,

Defendant.

SECOND AMENDED COMPLAINT

COMES NOW Plaintiff, KIM BANNER, as Personal Representative of the Estate of JEREMY BANNER, deceased, by and through her undersigned counsel, and hereby files suit against Defendant, TELSA, INC. a/k/a TESLA FLORIDA, INC. (hereinafter referred to as "TESLA"), based on the following allegations:

ALLEGATIONS COMMON TO ALL COUNTS

This is an action for damages that exceed the sum of Fifteen Thousand Dollars (\$15,000.00), exclusive of costs and attorneys' fees.

- 2. At all times material hereto, Plaintiff, KIM BANNER, has been appointed as the Personal Representative of the Estate of JEREMY BANNER, deceased, and litigates this wrongful death action on behalf of the Estate of JEREMY BANNER and on behalf of all survivors.
- 3. JEREMY BANNER died on March 1, 2019 as a direct result of injuries suffered in an automobile crash which occurred at the 14000 block of State Highway 441 (US 441), Delray Beach in Palm Beach County, Florida.
- 4. JEREMY BANNER was born on October 25, 1968 and was 50 years old at the time of his untimely death.
- 5. At the time of the subject automobile crash, Plaintiff, KIM BANNER, was married to JEREMY BANNER and is the surviving spouse of JEREMY BANNER, deceased.
- 6. At all times material hereto, JEREMY BANNER has three surviving children under the age of twenty-five (25):
 - a) Rachel Alliyah Banner Date of Birth: November 19, 1999
 - b) Alexandra Rene Banner Date of Birth: February 9, 1995
 - Damion James Banner
 Date of Birth: December 25, 1994
- 7. The surviving minor children of the deceased, JEREMY BANNER, are entitled to recover damages under the Florida Wrongful Act.
- 8. At all times material hereto, KIM BANNER, was married to JEREMY BANNER and living together as husband and wife.

- 9. The Estate of JEREMY BANNER is entitled to recover damages under the Florida Wrongful Death Act.
- 10. Plaintiff, KIM BANNER, the surviving spouse of the deceased, JEREMY BANNER, is entitled to recover damages under the Florida Wrongful Death Act.
 - 11. The survivors pursuant to the Florida Wrongful Death Act §768.21 are:
 - a) KIM BANNER
 - b) Rachel Alliyah Banner
 - c) Alexandra Rene Banner
 - d) Damion James Banner
- 12. At all times material hereto, Plaintiff, KIM BANNER, and decedent, JEREMY BANNER, were Florida residents residing at 10360 Cypress Lake Preserve Drive, Lake Worth, Palm Beach County, Florida.
- 13. At all times material hereto, RICHARD KEITH WOOD, was and is a Florida resident; specifically residing at 2115 Roanoke Springs Drive, Euskin, Florida.
- 14. The automobile collision which is the subject of this lawsuit occurred on March 1, 2019 at the 14000 block of State Highway 441 (US 441), Delray Beach, Palm Beach County, Florida.
- 15. At all times material hereto and prior to the accident which is the subject of this lawsuit, JEREMY BANNER, purchased the subject 2018 Tesla Model 3 (VIN #: 5YJ3E1ÉB2JF079950) from Defendant, TELSA.

- 16. At the time of the subject automobile collision, JEREMY BANNER, was occupying the subject Tesla Model 3 manufactured and sold to him by Defendant, TESLA.
- 17. At all times material hereto, Defendant, TESLA, was a foreign corporation which was licensed and authorized to do business in the State of Florida and sold the subject Tesla Model 3 to JEREMY BANNER in Palm Beach County, Florida.
- 18. At all times material hereto, FIRSTFLEET was a foreign corporation specializing in the operation of a fleet of commercial semi-tractor trailers which owned and operated such commercial vehicles throughout the United States and specifically within Palm Beach County, Florida.
- 19. At the time of the automobile collision which is the subject of this lawsuit, RICHARD KEITH WOOD, was a professional commercial truck driver operating the subject semi-tractor trailer (VIN #: 3HCDZAPR1KL241561) with the knowledge and consent of FIRSTFLEET.
- 20. At the time of the automobile collision in question, FIRSTFLEET, owned the subject commercial semi-tractor trailer driven by their employee, RICHARD KEITH WOOD.
- 21. At the time of the automobile collision in question, RICHARD KEITH WOOD, was an employee and/or agent of FIRSTFLEET, and was acting within the course and scope of his employment/agency as a commercial truck driver for FIRSTFLEET.

- 22. FIRSTFLEET is vicariously responsible for the actions and/or inactions of its employees, including but not limited to RICHARD KEITH WOOD.
- 23. FIRSTFLEET is vicariously responsible for the negligence on the part of its employees, including but not limited to RICHARD KEITH WOOD.
- 24. Defendant, TESLA, is vicariously responsible for the actions and/or inactions of its employees, including but not limited to its CEO and President, ELON MUSK.
- 25. Defendant, TESLA, is vicariously responsible for the negligence on the part of its employees, including but not limited to its CEO and President, ELON MUSK.

COUNT I - STRICT LIABITY BANNER v. TESLA

Plaintiff, KIM BANNER, as Personal Representative of the Estate of JEREMY BANNER, deceased, realleges each and every allegation contained in paragraphs 1 through 25, and, by reference, further states:

- 26. At all times material hereto, Defendant, TELSA, was a foreign corporation which was licensed and authorized to do business in the State of Florida.
- 27. At all times material hereto, Defendant, TESLA, was engaged in the business of designing, testing, manufacturing, distributing, promoting, maintaining and selling motor vehicles which were used in the State of Florida for use on public roadways. Defendant, TESLA, is an American corporation specializing in, among other things, the design, manufacture, and sale of all-electric powered cars to be used on streets and highways of the State of Florida.

- 28. In contrast to the majority of other automobiles and SUV's sold in the United States, Defendant, TESLA's vehicles do not have internal combustion engines. All the systems within the Tesla models including but not limited to the subject Tesla vehicle, are electrically powered, and are controlled by computers and microprocessors which have been designed manufactured and programed by Defendant's engineers. Such computers, microprocessors and programs control all aspects of the subject Tesla's operation, including the drivetrain, braking system and "autopilot system", including Tesla's "traffic-aware cruise control" and Tesla's "autosteer lane-keeping assistance". is available The subject Tesla manual online Model owner's at www.tesla.com/teslaaccount.
 - 29. All Tesla model 3 vehicles include the following safety features:
 - a) "lane assist";
 - b) "collision avoidance assist";
 - c) "speed assist"; and,
 - d) "auto high beam".
- 30. The subject Model 3 Tesla purchased by JEREMY BANNER was also equipped with the following Tesla "autopilot" safety features:
 - a) "traffic one— aware cruise control"; and
 - b) "autosteer".
- 31. Based on Tesla's advertising, promotional material and information supplied to its customers in its owner's manual, Defendant, TESLA, confirmed "if you have purchased the optional Enhanced Autopilot or Full Self-Driving Capability Package, the forward looking cameras and the radar sensor are designed to determine when there is

a vehicle in front of you in the same lane. If the area in front of Model 3 is clear, traffic-aware cruise control maintains a set driving speed. When a vehicle is detected, traffic-aware cruise control is designed to slow down Model 3 as needed to maintain a selected timed based distance from the vehicle in front, up to the set speed."

32. Based on Tesla's advertising, promotional material and its Model 3 owner's manual, Defendant, TESLA, claimed that:

"if you have purchased the optional Enhanced Autopilot or Full Self-Driving Capability Packages, you can use Auto Steer to manage steering and speed under certain circumstances. Auto Steer builds upon trafficaware cruise control, intelligently keeping Model 3 in its driving lane when cruising at a set speed. Auto Steer also allows you to use the turn signals to move Model 3 into an adjacent lane. Using the vehicle's cameras, the radar sensor, and the ultrasonic sensors, auto steer detects lane markings and the presences of vehicles and objects for steering Model 3".

33. Based on Tesla's advertising, promotional material and owner's manual, Tesla's customers including decedent, JEREMY BANNER, believed the Tesla Model 3's technology was such that the auto pilot features included design and programs, software, hardware, and systems that would eliminate the risk of harm or injury to the vehicle operator caused by other vehicles or obstacles while driving on roadways and would prevent the vehicle from colliding with other obstacles/objects while in auto pilot mode. Decedent, JEREMY BANNER, reasonably believed the subject 2018 Tesla Model 3 vehicle was safer than a human-operated vehicle because Defendant, TESLA claimed

superiority regarding the vehicle's auto pilot system, including Tesla's "full self-driving capability", Tesla's "traffic-aware cruise control", Tesla's "auto steer lane-keeping assistance" and other safety related components, and Defendant, TESLA's claim that all of the self-driving safety components engineered into the vehicle and advertised by Defendant, TESLA, would prevent fatal injury resulting from driving into obstacles and/or vehicles in the path of the subject Tesla vehicle.

- 34. All Tesla vehicles, including the 2018 Model 3 which is the subject of this lawsuit, relied upon a system of external sensors which, by design if working properly, should prevent the vehicle from driving into an obstacle or vehicle in the Tesla's path.
- 35. At the time of the design, manufacture, distribution, and delivery into the stream of commerce of the Tesla Model 3 vehicle, it lacked a properly designed system for crash avoidance. As a result, it was a vehicle that could and would strike and collide with ordinary and foreseeable roadway obstacles and other vehicles while the Tesla was in autopilot mode.
- 36. At the time Defendant, TELSA, placed the subject Tesla Model 3 into the stream of commence, the company specifically knew that its product was defective and would not properly and safely avoid impacting other vehicles and obstacles in its path.
- 37. At all times material hereto and prior to the subject crash, Defendant, TESLA, had specific knowledge of numerous prior incidents and accidents in which its safety systems on Tesla vehicles completely failed causing significant property damage, severe injury and catastrophic death to its occupants.

- 38. At all times material hereto and prior to the subject crash, Defendant, TESLA, included design, program, software, hardware and systems that would immediately notify Defendant, TESLA, of any significant collision and/or accident involving one of their Tesla vehicles.
- 39. At all times material hereto and prior to the subject crash, Defendant, TESLA, had specific knowledge and conducted specific investigations into numerous Tesla collisions in which its safety systems completely failed causing significant property damage, severe injury and catastrophic death to its occupants.
- 40. Defendant, TESLA, investigated a Tesla collision which occurred on January 20, 2016, in which it was determined the Tesla vehicle rear-ended a road sweeper causing fatal injuries to Gao Yaning in Handan, China while the vehicle safety features were engaged. It was determined the subject safety features were defective and did not work properly resulting in this fatal collision and death of Gao Yaning.
- 41. On January 22, 2018, a Tesla vehicle collided with a Culver City Fire Department truck that was stopped in an emergency lane while operating in "autopilot". The Tesla was traveling at 65 miles per hour and ran directly into the rear of the fire truck which was parked to respond to another accident. Defendant, TESLA, investigated the subject accident and confirmed that its safety systems and "autopilot" feature completely failed and resulted in the subject collision.
- 42. On March 23, 2018, a Tesla vehicle operated by Wei Lun Huang in Mountainview, California was on "autopilot" and struck a crash attenuator at a speed of approximately 71 miles per hour thereafter resulting in a massive collision with two other vehicles resulting in the death of the Tesla driver, Wei Lun Huang. Defendant, TESLA,

investigated the subject accident and confirmed that its safety systems and "autopilot" feature completely failed and resulted in the subject collision and death of Wei Lun Huang.

- 43. On May 8, 2018, a Tesla vehicle operating on "autopilot" mode at the 1300 block of Seabreeze Boulevard in Fort Lauderdale, Florida, lost control causing the vehicle to drive across a curb, through a sidewalk and collided with a wall causing the vehicle to erupt into flames resulting in the death of the Tesla driver, Edgar Monserratt-Martinez, and the right front passenger in the Tesla.
- 44. On May 11, 2018, Heather Lommatzsch was operating a Tesla vehicle in South Jordan, Utah on "autopilot" with hands free operation, traveling at a speed of approximately 65 miles per hour when the safety feature of the Tesla failed to work properly causing the Tesla vehicle to collide with a fire authority maintenance vehicle resulting in severe and debilitating injuries to the Tesla driver.
- 45. On May 29, 2018, a Tesla operator was using the safety "autopilot" feature and struck a Laguna Beach Police vehicle that was parked along the edge of the roadway resulting from the improper and defective failure of the Tesla auto pilot system.
- 46. On October 12, 2018, Sean Hudson was operating a Tesla vehicle on the Florida Turnpike in Orange County, Florida in "autopilot" mode which resulted in the Tesla vehicle improperly striking the rear of another vehicle at a speed of approximately 80 miles per hour resulting in severe, permanent and debilitating physical injuries.
- 47. Defendant, TESLA, and the company's President, Elon Musk, specifically knew of numerous prior accidents and collisions resulting from the defective nature and

failure of Tesla's "autopilot" safety features which resulted in numerous injuries and deaths to Tesla occupants and/or others involved in the subject collisions.

- 48. On May 7, 2016, a Tesla vehicle driven by Joshua Brown near Williston, Florida while in "autopilot" drove underneath a tractor trailer that had pulled from a side street violating Joshua Brown's right of way, resulting in Joshua Brown's untimely death.
- 49. The National Transportation Safety Board ("NTSB") conducted a thorough investigation of the Tesla accident which occurred on May 7, 2016 resulting in the untimely death of Joshua Brown near Williston, Florida.
- 50. The NTSB investigation of the Joshua Brown accident confirmed that TESLA's automated vehicle control system was engaged at the time of the crash and did absolutely nothing to avoid or prevent the collision and resulting death.
- 51. Defendant, TESLA, and their President and CEO, Elon Musk, were informed of the facts and findings of the numerous NTSB investigations confirming that their product was defective and confirming that their unsafe product would continue to result in significant catastrophic injury and death to occupants of Tesla vehicles and other drivers exposed to such dangerous conditions throughout the United States.
- 52. Defendant, TESLA, and their President and CEO, Elin Musk, conducted a thorough investigation of the subject Tesla accident involving the death of Joshua Brown on May 7, 2016.
- 53. In a conference call with reporters following the death of Joshua Brown, Tesla President and CEO, Elon Musk, admitted that upgrades to Tesla's safety system would have prevented the accident on May 7, 2016 and untimely death of Joshua Brown.

- 54. Defendant, TESLA, and their President and CEO, Elon Musk, admitted they were aware of the defect in the safety system of the Tesla which caused the safety system to fail; specifically the defect would cause the Tesla to fail to identify and avoid tractor trailers crossing the path of a Tesla operator resulting in the Tesla taking no steps at all to avoid a collision.
- 55. Defendant, TESLA, and their President and CEO, Elon Musk, specifically made the decision not to recall any of its Tesla vehicles when they knew such vehicles were defective and would pose a significant risk of injury and death to occupants of Tesla vehicles and occupants of other drivers on the roadways of the United States.
- 56. Defendant, TESLA, and their President and CEO, Elon Musk, specifically made the decision to continue to profit from the sales of their vehicles without taking the appropriate steps to ensure the safety of its occupants and other drivers on the roadways of the United States by implementing measures to correct the defective nature of its product.
- 57. Defendant, TESLA, and their President and CEO, Elon Musk, indicated that the word "recall" does not make sense because the "fix" for the defective nature of the Tesla product would be an "over-the-air-update".
- 58. At all times material hereto and prior to the collision in question which resulted in the untimely death of JEREMY BANNER, Defendant, TESLA, failed to make appropriate changes to remedy the defective nature of the subject Tesla "autopilot system" and its claimed "full self-driving capability package".

- 59. On the morning of Friday, March 1, 2019, JEREMY BANNER left his home to go to work traveling southbound on State Highway 441 (U.S. 441) in his 2018 Tesla Model 3.
- 60. At all times material hereto, JEREMY BANNER, was operating the subject Tesla vehicle in the southbound lanes of State Highway 441 (U.S. 441) when a semi-tractor trailer owed by FIRSTFLEET, and operated by RICHARD KEITH WOOD, pulled through a stop sign eastbound directly into the path of the Tesla vehicle occupied by JEREMY BANNER, deceased.
- 61. The Tesla "autopilot" system was engaged by JEREMY BANNER approximately 10 seconds before the collision which resulted in his death.
- 62. At all times material hereto and at the time of this subject crash, the TESLA "autopilot" system was engaged at the time the tractor trailer owned by FIRSTFLEET and operated by RICHARD KEITH WOOD, crossed into the path of the Tesla vehicle occupied by JEREMY BANNER.
- 63. At all times material hereto and at the time of the subject collision, the aforementioned Tesla safety features including but not limited to Tesla's "autopilot" system completely failed to do anything to brake, slow down, steer, or otherwise avoid the collision which caused the subject Tesla Model 3 to drive completely under the subject trailer resulting in the death of JEREMY BANNER.
- 64. At all times material hereto and at the time of this subject crash, the subject Tesla Model 3 struck the left side of the semi-tractor trailer causing the roof of the Tesla to be sheared off as the vehicle under-road the semi-tractor trailer and continued

southbound coming to final rest 1,600 feet from where the collision occurred with Defendant's semi-tractor trailer.

- 65. Defendant, TESLA, conducted a thorough investigation of the subject accident involving the untimely death of JEREMY BANNER.
- 66. Defendant, TESLA, confirmed and determined that Tesla's "autopilot" safety system was engaged at the time of the crash which caused the untimely death of JEREMY BANNER.
- 67. Defendants, TESLA, confirmed that the Tesla "autopilot" system was defective and did not work properly in regards to the crash which resulted in the untimely death of JEREMY BANNER.
- 68. Defendant, TESLA, determined that Tesla's "autopilot" system was defective and failed to do anything to attempt to avoid the collision which resulted in the untimely death of JEREMY BANNER.
- 69. Notwithstanding the fact that the subject Tesla Model 3 vehicle was marketed and sold as a "state of the art" automobile with the "full self-driving capability package", the vehicle was without safe and effective automatic emergency braking safety feature that was operable on the date of this collision. By that date, multiple other manufacturers of vehicles, including Subaru, Mazda, Chrysler, Mitsubishi, and Honda, all less expensive vehicles, had vehicles in production with automatic emergency braking safety features available no later than the 2015 model year.
- 70. At all times material hereto and at the time JEREMY BANNER purchased the subject Tesla Model 3 from Defendant, TESLA, it was marketed to the general public by Tesla that such vehicles featured safety systems marketed as "autopilot" and "full self-

driving capability package" which claim to prevent collisions by way of an automatic emergency braking system that reasonably matched the vehicle speed to traffic conditions, kept vehicles within their lane, transitioned from one freeway to another, exited freeways when a destination was near, provided active automatic collision avoidance and automatic emergency braking which should detect objects the car might impact, and apply the brakes accordingly to avoid impact or injury.

- 71. The subject Tesla vehicle as herein described was defective and unreasonably dangerous at the time it was so designed, manufactured, assembled, sold, distributed, marketed, promoted, placed within the stream of commerce and marketplace, and allowed to be used therein in the ways set forth herein:
- a. The vehicle was not crash-worthy; the vehicle safety system was defective and did not work properly; the vehicle safety system was defective and did not work properly to sense the presence and danger of the subject semi-tractor trailer;
- b. The Tesla vehicle's safety system was defective and did not work properly to steer to avoid the subject collision;
- c. The Tesla vehicle's safety system was defective and did not work properly to brake to avoid the collision; and,
- d. The Tesla vehicle's safety system was otherwise defective in ways that will be demonstrated by the evidence obtained during discovery.
- 72. The aforesaid defects existed at the time of the design, manufacture and assemble of said Tesla vehicle, continued to remain an integral characteristic of said vehicle at the time it was sold, distributed, placed within the stream of commerce and marketplace, and allowed to be used therein by Defendant, TESLA, and remained as such

up to and including the time that JEREMY BANNER died as a direct result of said defects and, as a result, Defendant, TESLA, is strictly liable to Plaintiff.

- 73. The decedent, JEREMY BANNER, was unaware of the aforesaid defects and dangerousness of said product, which made such product unsafe for its intended and foreseeable use, nor were such defects apparent by reasonable inspection.
- 74. As a direct and proximate result, JEREMY BANNER's surviving spouse, Plaintiff, KIM BANNER, is entitled to damages as provided by the Wrongful Death Act §768.21, including but not limited to the following damages:
 - a. loss of support and services;
 - b. loss of companionship and protection;
 - c. pain and suffering and mental anguish;
 - d. medical and funeral expenses; and,
 - e. loss of the net accumulations of the Estate.

All of the foregoing damages are continuing into the future and are permanent.

- 75. As a direct and proximate result, Rachel Alliyah Banner, decedent's surviving child, is entitled to damages as provided by the Wrongful Death Act §768.21, including but not limited to the following damages:
 - a. loss of support and services;
 - b. loss of companionship;
 - c. loss of instruction and guidance; and,
 - d. pain and suffering and mental anguish.

All of the foregoing damages are continuing into the future and are permanent.

- 76. As a direct and proximate result, Alexandra Rene Banner, decedent's surviving child, is entitled to damages as provided by the Wrongful Death Act §768.21, including but not limited to the following damages:
 - a. loss of support and services;
 - b. loss of companionship;
 - c. loss of instruction and guidance; and,
 - d. pain and suffering and mental anguish.

All of the foregoing damages are continuing into the future and are permanent.

- 77. As a direct and proximate result, Damion James Banner, decedent's surviving child, is entitled to damages as provided by the Wrongful Death Act §768.21, including but not limited to the following damages:
 - a. loss of support and services;
 - b. loss of companionship;
 - c. loss of instruction and guidance; and,
 - d. pain and suffering and mental anguish.

All of the foregoing damages are continuing into the future and are permanent.

WHEREFORE, Plaintiff, KIM BANNER, as Personal Representative of the Estate of JEREMY BANNER, deceased, demands judgment for damages against Defendant, TESLA, and further demands trial by jury.

COUNT II - NEGLIGENCE CLAIM BANNER v. TESLA

Plaintiff, KIM BANNER, as Personal Representative of the Estate of JEREMY BANNER, deceased, realleges each and every allegation contained in paragraphs 1 through 77 by reference and further states as follows:

- 78. At all times material hereto, it was the duty of Defendant, TESLA, to exercise due care in the design, manufacture, assembly, distribution and/or sale of the subject Tesla vehicle, and in placing such Tesla vehicle into the stream of commerce said that such Tesla vehicle would be reasonably safe for its intended use and for other uses that were foreseeable.
- 79. At all times material hereto, it was the duty of Defendant, TESLA, to ensure that the subject Tesla vehicle that it placed into the stream of commerce was safe for use by its intended users and those persons who may foreseeably come into close proximity to it, such as decedent, JEREMY BANNER.
- 80. At all times material hereto and at the time of the incident complained of, Defendant, TESLA, was negligent and failed to warn that the vehicle was defective in the manners and ways set forth herein:
- a. The vehicle was not crash-worthy; the vehicle safety system was defective and did no work properly; the vehicle safety system was defective and did not work properly to sense the presence and danger of the subject semi-tractor trailer;
- b. The Tesla vehicle's safety system was defective and did not work properly to steer to avoid the subject collision;

- c. The Tesla vehicle's safety system was defective and did not work properly to brake to avoid the collision; and,
- d. The Tesla vehicle's safety system was otherwise defective in ways that will be demonstrated by the evidence obtained during discovery.
- 81. Defendant, TESLA, designed, manufactured, assembled, distributed, sold and placed within the stream of commerce and marketplace, as the subject Tesla vehicle was hereinabove specifically described, the vehicle intended to be used by the ultimately consumer, and Defendant, TESLA, knew or with the exercise of reasonable care should have known, that said Tesla vehicle was negligently designed, manufactured, and assembled.
- 82. Defendant, TESLA, negligently failed to give proper warnings to any purchaser or user of the vehicle concerning its dangerous condition and propensities, or the fact that the subject Tesla vehicle was unreasonably dangerous during use, and, as such, could cause injury to those persons in close proximity thereto.
- 83. Defendant, TESLA, negligently designed, manufactured, assembled, marketed, sold, and/or allowed to be used in the marketplace the subject Tesla vehicle without warnings as to its dangers and as to its proper use, and knew or should have known the aforesaid subject Tesla vehicle, when used within the purposes for which it was designed, manufactured, and intended, was unreasonably dangerous and hazardous to those persons in close proximity thereto.
- 84. Defendant, TESLA, negligently failed to warn the consumer, user, operator, and those in the vicinity of said Tesla vehicle of its extremely dangerous and hazardous characteristics, propensities, and defects, and, after placing said vehicle on the

market and allowing its use herein, failed to recall said vehicle from the market, said recall being necessitated because of said unreasonably dangerous and hazardous defects contained herein.

- 85. Decedent, JEREMY BANNER, was unaware of the aforementioned defects and dangerousness of said product which made such product unsafe for its intended and foreseeable use, nor were such defects apparent by reasonable inspection.
- 86. As a direct and proximate result, JEREMY BANNER's surviving spouse, Plaintiff, KIM BANNER, is entitled to damages as provided by the Wrongful Death Act §768.21, including but not limited to the following damages:
 - a. loss of support and services;
 - b. loss of companionship and protection;
 - c. pain and suffering and mental anguish;
 - d. medical and funeral expenses; and,
 - e. loss of the net accumulations of the Estate.

All of the foregoing damages are continuing into the future and are permanent.

- 87. As a direct and proximate result, Rachel Alliyah Banner, decedent's surviving child, is entitled to damages as provided by the Wrongful Death Act §768.21, including but not limited to the following damages:
 - a. loss of support and services;
 - b. loss of companionship;
 - c. loss of instruction and guidance; and,
 - d. pain and suffering and mental anguish.

All of the foregoing damages are continuing into the future and are permanent.

- 88. As a direct and proximate result, Alexandra Rene Banner, decedent's surviving child, is entitled to damages as provided by the Wrongful Death Act §768.21, including but not limited to the following damages:
 - a. loss of support and services;
 - b. loss of companionship;
 - c. loss of instruction and guidance; and,
 - d. pain and suffering and mental anguish.

All of the foregoing damages are continuing into the future and are permanent.

- 89. As a direct and proximate result, Damion James Banner, decedent's surviving child, is entitled to damages as provided by the Wrongful Death Act §768.21, including but not limited to the following damages:
 - a. loss of support and services;
 - b. loss of companionship;
 - c. loss of instruction and guidance; and,
 - d. pain and suffering and mental anguish.

All of the foregoing damages are continuing into the future and are permanent.

WHEREFORE, Plaintiff KIM BANNER, as Personal Representative of the Estate of JEREMY BANNER, deceased, demands judgment for damages against Defendant, TESLA, and further demands trial by jury.

COUNT III - PUNITIVE DAMAGES CLAIM BANNER v. TESLA

Plaintiff, KIM BANNER, as Personal Representative of the Estate of JEREMY BANNER, deceased, realleges each and every allegation contained in paragraphs 1 through 89 by reference and further states as follows:

- 90. At all times material hereto and prior to the subject crash, Defendant, TESLA, had specific knowledge through its officers, directors, managers or other employees/agents including its President and CEO Elon Musk, that its product was defective and would not properly and safely avoid impacting other vehicles and obstacles in its path.
- 91. At all times material hereto and prior to the subject crash, Defendant, TESLA, had specific knowledge through its officers, directors, managers or other employees/agents including its President and CEO Elon Musk, that its product was defective based on, among other things, inadequate design, testing, and manufacture of "autopilot."
- 92. At all times material hereto and prior to the subject crash, Defendant, TESLA, had specific knowledge through its officers, directors, managers or other employees/agents including its President and CEO Elon Musk, that its product was defective based on government investigations, recommendations, and warnings provided by the National Transportation Safety Board and the National Highway Traffic Safety Administration.
- 93. At all times material hereto and prior to the subject crash, Defendant, TESLA, had specific knowledge through its officers, directors, managers or other employees/agents including its President and CEO Elon Musk, that its product was

defective based on numerous prior incidents and accidents in which its safety systems on Tesla vehicles completely failed causing significant property damage, severe injury and catastrophic death to its occupants, including but not limited to the substantially similar accident involving Joshua Brown on May 7, 2016.

- 94. At all times material hereto and prior to the subject crash, Defendant, TESLA, failed to correct its defective product and instead continued to mislead the public, including JEREMY BANNER, as to the purported capabilities and safety of the product through the public statements of the company and statements by its President and CEO, ELON MUSK, despite having the foregoing knowledge.
- 95. The aforementioned conduct of Defendant, TESLA was motivated by financial gain, by a desire to gain market share, and by pressure to avoid bankruptcy. Defendant, TESLA, and its President and CEO, Elon Musk, specifically made the decision to continue to profit from the sales of their defective vehicles without taking the appropriate steps to ensure the safety of its occupants and other drivers on the roadways of the United States.
- 96. At all times material hereto, Defendant, TESLA, engaged in intentional misconduct or gross negligence in the following manner:
 - a. Allowing the "autopilot" system to be used outside of Tesla's stated operational design domain (ODD), on roadways with cross-traffic;
 - b. Allowing the "autopilot" system to be used in excess of the posted speed limit on roadways with cross-traffic;
 - c. Making public statements that its "autopilot" technology is far more capable than it actually is;
 - d. Relying on radar to detect crossing traffic despite established history of underride crashes and concerns raised internally within Tesla;

- e. Failing to re-train its computer vision dataset to include broadside trucks despite Tesla's knowledge of a previous death involving Tesla's "autopilot" and a broadside semi-truck
- f. Failing to "label-boost"/VIP status images of broadside trucks despite Tesla's knowledge of a previous death involving Tesla's "autopilot" and a broadside semi-truck.
- g. Failing to re-train its computer vision dataset to include different lighting conditions;
- h. Allowing drivers of its vehicles, while "autopilot" is engaged, to take hands off the steering wheel for 30 seconds or more despite Tesla claiming its "autopilot" system is a level 2 system which requires drivers to be ready to take immediate action;
- i. Failing to provide adequate warnings in the owner's manual that the "autopilot" system has problems detecting crossing traffic;
- j. Failing to follow recommendations of Continental's testing recommendation which warned Tesla of the limitations of detecting crossing traffic;
- k. Failing to conduct adequate testing of both its radar and computer vision systems;
- Failing to adequately train senior Tesla engineers and employees on basic information such as ODD and the need for consideration of human factors when designing and implanting its "autopilot" system;
- m. Failing to use cameras to detect inattention of the driver;
- n. Failing to utilize human factors expertise and/or human factors consultants in the design and creation of its warnings and user-interface;
- o. Failing to conduct testing to determine adequate perception/reaction times of the "autopilot" system;
- p. Failing to provide adequate supervision and quality assurance of subcontractors involved with the "autopilot" system;
- q. Denying that misuse of its "autopilot" system is a potential hazard;

- r. Failing to alert drivers while engaged in "autopilot" that the Tesla vehicle is no longer in Tesla's designated ODD;
- s. Failing to keep with known standards;
- t. Failing to use reasonable care and practical engineering principles under all the relevant circumstances.
- 97. At all times material hereto, Defendant, TESLA, had actual knowledge of the wrongfulness of the conduct and the high probability that injury or damage to JEREMY BANNER and his survivors would result and, despite that knowledge, intentionally pursued the foregoing course of conduct, resulting in JEREMY BANNER's death. In other words, the Defendant's conduct rises to the level of intentional misconduct, and an award of punitive damages is proper.
- 98. Alternatively, at all times material hereto, the conduct of Defendant, TESLA, was so reckless or wanting in care that it constituted a conscious disregard or indifference to the life, safety, or rights of people exposed to it like JEREMY BANNER. In other words, the Defendant's conduct rises to the level of gross negligence, and an award of punitive damages is proper.
- 99. The wrongful conduct of Defendant, TESLA, was motivated solely by unreasonable financial gain, and the unreasonably dangerous nature of the conduct, together with the high likelihood of injury resulting from the conduct, was actually known by the managing agent, director, officer, or other person responsible for making policy decisions on behalf of Defendant, TESLA.
- 100. As a direct and proximate result of the intentional misconduct or gross negligence of the Defendant, TESLA, JEREMY BANNER died and his surviving spouse, Plaintiff KIM BANNER, and his surviving children, Rachel Alliyah Banner, Alexandra Rene Banner, and Damion James Banner, are entitled to punitive damages.

WHEREFORE, Plaintiff KIM BANNER, as Personal Representative of the Estate of JEREMY BANNER, deceased, demands judgment for punitive damages against Defendant, TESLA, and further demands trial by jury.

I HEREBY CERTIFY that on the _____ day of _______, 2023, the foregoing document is being served this day on all counsel of record or pro se parties identified on the attached Service List in the manner specified by Rule 2.516 or in some other authorized manner for those counsel or parties who are not authorized to receive service by electronic mail consistent with Rule 2.516(b)(2).

LAKE H. LYTAL, III., ESQUIRE Florida Bar No.: 0129119 Attorneys for Plaintiffs Lytal, Reiter, Smith, Ivey & Fronrath 515 N. Flagler Drive, 10th Floor West Palm Beach, FL 33401 Telephone: (561) 655-1990

Email: tlytal@foryourrights.com Email: cwilkinson@foryourrights.com IN THE CIRCUIT COURT OF THE 15TH JUDICIAL CIRCUIT IN AND FOR PALM BEACH COUNTY, FLORIDA

CASE NO.: 50-2019-CA-009962 (AB)

KIM BANNER, AS PERSONAL REPRESENTATIVE OF THE ESTATE OF JEREMY BANNER, DECEASED,

Plaintiff,

vs.

TESLA, INC. A/K/A TESLA FLORIDA INC., FIRSTFLEET, INC. OF TENNESSEE A/K/A FIRSTFLEET, INC., AND RICHARD KEITH WOOD,

Defendants.

DEPOSITION OF CHRISTOPHER C. MOORE TAKEN ON BEHALF OF THE PLAINTIFF

CONFIDENTIAL PORTIONS (PAGES 33-35, 58-62, 65-69, 73, 78, 82)

SEPTEMBER 25, 2020 01:11 P.M. TO 03:25 P.M.

ALL PARTIES APPEARED REMOTELY
PURSUANT TO
FLORIDA SUPREME COURT ORDER AOSC20-23

REPORTED BY: MARIA ESPINOZA, COURT REPORTER NOTARY PUBLIC, STATE OF FLORIDA





1	Q	And then Andrej's role?
2	A	Andrej is the computer vision or AI.
3	Q	And Ashok's role?
4	A	Ashok is perception motion planning controls.
5	Q	Okay. And then obviously do have a head of
6	each of th	he team divisions like the stimulation is there
7	head pers	on of that?
8	A	There is.
9	Q	Who is that?
10	A	Ian.
11	Q	And last name?
12	A	Glow G-L-O-W.
13	Q	Okay. And the integration team, who heads
14	that?	
15	A	That doesn't have a specific manager. Theirs
16	is a colle	ection of individual contributors.
17	Q	And how about the last team you mentioned?
18	A	There's two more, there is the QA team which
19	is led by	Geoff Wacker.
20	Q	Okay.
21	A	And then there is the programs team which is
22	also a set	t of individual contributors.
23	Q	
24		
25	Α	EXHIBIT "A"





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Q Okay. And I'm going to try to go through the scope of what we talked about that I was going to cover with you. I want to kind of start backwards and talk about all these autopilot documents that Tesla recently produced and they are Bate Stamped so to help with any confidentiality issues. I don't think we have to attach anything as exhibits.

MR. LYTAL: Is that okay, Bob, if we're just referring to specific documents, we can just refer to Bate Stamp Numbers and that way they don't have to be attached?

MR. GALVIN: Sure.

Q (By Mr. Lytal) Okay. I have the documents that I was produced by Tesla a few ago, they were 8,652 Bate Stamped documents. Sir, are you familiar with those documents that I'm talking about?

A I mean, I'm familiar with them generally. I mean, obviously 8,000 plus documents that we can't that I have intimate knowledge of each and every one of them.

Q Understood. I didn't know if what they produced and there's like -- I think I've got like 10 binders that are like this thick each. Are all those documents referred to by Tesla as one thing or is it

IN THE CIRCUIT COURT OF THE FIFTEENTH JUDICIAL CIRCUIT IN AND FOR PALM BEACH COUNTY, FLORIDA

CASE NO. 50-2019-CA-009962 (AB)

KIM BANNER, as Personal Representative of the ESTATE OF JEREMY BANNER, deceased,

ORIGINAL

Plaintiff,

VS.

TESLA, INC. a/k/a TESLA
FLORIDA, INC., FIRSTFLEET, INC.
OF TENNESSEE a/k/a FIRSTFLEET, INC.,
and RICHARD KEITH WOOD,

Defendants.

VOLUME I

VIDEOTAPED DEPOSITION OF ELOY RUBIO BLANCO

TAKEN ON BEHALF OF THE PLAINTIFF

NOVEMBER 29, 2022 12:03 P.M. TO 5:36 P.M.

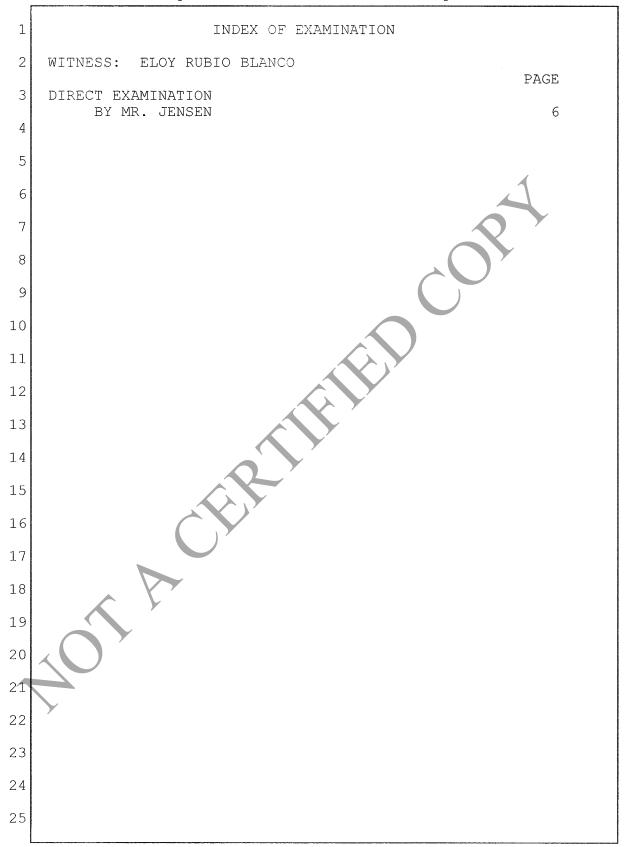
ALL PARTIES APPEARED REMOTELY
PURSUANT TO
FLORIDA SUPREME COURT ORDER AOSC20-23

Reported By: CHERYL L. WILSON, Court Reporter Notary Public, State of Florida



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         Ryan McCarthy, Esquire, Inhouse Counsel, Tesla, Inc.
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	INDEX OF EXHIBITS	
EXHIBIT	DESCRIPTION	PAGE
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2	ODI Resume from NHTSA	21
3	Tesla Motors Second Response to PE16-007	23
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5	AP 2020 Safety Goals	162
6	Tesla's Response to NHTSA	1.05
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(Exhibits 7 Esquire.)	, 8 and 9 were retained by Daniel J ϵ	ensen,
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	EXHIBIT Plaintiff's 1 2 3 4 5 6 7 8 9 (Exhibits 7	INDEX OF EXHIBITS EXHIBIT DESCRIPTION Plaintiff's 1 Tesla Autopilot Response to NHTSA 2 ODI Resume from NHTSA 3 Tesla Motors Second Response to PE16-007 4 CBI - Excel Spreadsheet - Diagnostic Log Data Brown Vehicle 5 AP 2020 Safety Goals 6 Tesla's Response to NHTSA Regarding Collision 7 Video Bates Stamp Tesla 00058654 8 Video Bates Stamp Tesla 00058659 9 Video Bates Stamp Tesla 00058660 (Exhibits 7, 8 and 9 were retained by Daniel Jetal

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Right. So my question specifically was did Q. you see anything in the data set here prior to the impact, which you've labeled as 18033, that give any indication that there were any warnings or signals that were triggered of a tractor trailer or identifying this tractor trailer in the middle of the road?

- Α. This data set does not include information about the specific inputs that the Autopilot computer had at that time. But upon my review of this data set, I concluded that the vehicle operated without fault at the time of the incident since there were no alerts or signals indicative of any fault or a trauma code triggered by the Autopilot or any vehicle systems at that time.
- I mean, is there a different data set that we Q. could look to that would provide any information or either show or not show whether anything in the system triggered or was alerted of a tractor trailer in the middle of the road in that particular case, in the Williston case?
- Α. This vehicle is a Hardware 1 vehicle and my understanding is that the data that we retrieved from that collision was limited to this data set or this diagnostic log data.

1	Α.	Yes, I am.
2	Q.	And how long have you held this particular
3	position	with Tesla?
4	Α.	I've held this particular position since May
5	this year	. I was promoted at this time.
6	Q.	Okay. Congratulations.
7	Α.	Thank you.
8	Q.	And it sounds like you were promoted,
9	obviously	you worked with Tesla prior to May of 2022,
10	correct?	
11	А.	Correct.
12	Q.	How long have you worked with Tesla?
13	А.	I joined Tesla in March 2021.
14	Q.	And could you walk me through, so you're first
15	hired wit	h Tesla, what your job or role was and just
16	kind of to	ake me through up until you were promoted in
17	May of 20	22?
18	А.	Absolutely. I was a senior product support
19	engineer	and my work duties were similar to the ones I
20	just desc	ribed.
21	Q.	Okay. So what, I guess what was the promotion
22	for? Is	it more of a supervisory role now or do you
23	have peop	le under you?
24	Α.	The promotion was based on performance.
25	Q.	But as far as your job duties and



1	A. I was an associate engineer.
2	Q. And for how long?
3	A. Since February 2019.
4	Q. Similar question that I asked with Axiom, any
5	involvement or work on ADAS systems, whether they be
6	Level 2 or beyond?
7	A. I can't recall any.
8	Q. Got it. Any specific work on Tesla vehicles
9	or their Autopilot system?
10	A. No.
11	Q. Prior to that?
12	A. Prior to that I was doing research work for
13	college institution, the Illinois Institute of
14	Technology where I got my second master or post-graduate
15	degree.
16	Q. Where did you graduate college and when?
17	A. I graduated college in August 2018 from the
18	Illinois Institute of Technology for my masters in
19	mechanical and aerospace engineering.
20	Q. You were able graduate with masters?
21	A. Yeah, actually two masters.
22	Q. Oh, okay. That's great.
23	When you were first hired by Tesla in March of
24	2021, did you receive any type of specialized training
25	in regards to their Autopilot system?



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able to detect that as a tractor trailer, right.

Right. So I want to start from the beginning Q. and I'm glad you differentiated that. So in the very beginning, is it just a 2D image of a tractor trailer? Is it just a rectangle? Like, what are they using initially just to manually label an object of that shape?

- My understanding is they are using images or video from the vehicles.
- Q. Okay. So would this be called fleet learning? Is that a term that Tesla uses?
- That's a term that Tesla uses and I think it's fair to use in this subject.
- Okay. So fleet learning, just to make sure Q. that I have a good understanding, that would be similar to your engineer vehicle or other vehicles on the road constantly gathering information and identifying as we've been talking about possibly an object such as the side of a tractor trailer, the back of a car, things like that; is that a fair assessment of what fleet learning does?
- Α. I think so. Fleet learning will be requesting or retrieving data from vehicles. Of course in the beginning from either engineering vehicles or testing vehicles and then from the fleet.



Q. And for the three years give or take post-
Williston accident up until our accident of March '19,
you would agree with me that the fleet learning that
we've been talking about before was something that Tesla
was actively using to train its neural net for the
safety of everybody on the roadway, right, including its
own drivers and others, right?

- A. Well, the fleet learning was being used to develop these driver assistant Level 2 features.
- Q. Right. And that's something that was activity being done from 2016 through our accident in 2019 roughly, correct?
 - A. Correct.
- Q. During that period of time from Williston -again, I'm just going to use loosely, I know it's not
 exactly three years but I'm just going to use to loosely
 describe that period of time as three years -- are you
 aware of any manual labeling that was done to identify
 or flag the side of a tractor trailer for the Tesla
 Autopilot system?
- A. Well, as I said, I cannot specify specifically what was labeled at that time or manually labeled at that time during that period of time.
- Q. Do you know how long it would actually take for the Autopilot Team to manually label something like

1 to stop or slow down with a tractor trailer that's 2 perpendicular or cross traffic similar to the Banner 3 crash? MR. GALVIN: Object to the form. 4 5 THE WITNESS: As I've said, the intent of

> Tesla is to assist the driver as much as possible. But in terms of this specific feature, that scenario fell into the limitations of the technology at that time.

BY MR. JENSEN:

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- Would you agree with me that the Autopilot system in Mr. Banner's vehicle that was active at the time of the crash did not perform as Tesla intended it to?
- I can't agree to that. There was no fault alert or trauma code triggered from the Autopilot system, as well as any other vehicle systems. In terms of the Autopilot system, I think we have agreed that the driver is included in that system.
- And since there were no faults related to sensors, hardware or software, the only issue that I can see in that loop is the driver's hand not being detected on the wheel.
- Similarly, would you agree that the AEB system that was in Mr. Banner's vehicle at the time of our



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software and hardware version, everything else remains the same, does the software or hardware system do anything to stop, avoid or do anything to slow down before the collision with the tractor trailer?

MR. GALVIN: Object to the form.

THE WITNESS: As you may understand, I cannot simulate that scenario in my head. But I do know that as hardware and software improves, we've been able to farther assist the driver, even considering the limitations of these features and systems. I can say there's a high probability that those objects or more objects are detected.

BY MR. JENSEN:

- I mean, are you aware of any other cross Q. traffic accidents where the Autopilot features that we've discussing are in fact engaged and they run into something like a tractor trailer? Have you seen accidents like that after our accident?
- I am not aware of other incidents meeting the scenario requirements that you just mentioned.
- As far as -- and this will be, I'm kind of grouping both of these things together because we've already talked at length about it -- manual labeling or automatic labeling, after our accident are you specifically aware of anything that the Autopilot did in



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labeling?

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regards to the side of a tractor trailer in regards to

I'm not aware as to a specific -- sorry, let me rephrase this. After this crash as a result of the investigation, the Autopilot Team attempted to work on this kind of a scenario in order to assist the driver and prepare for future releases.

To that end, they manually labeled the side of trucks, to work on the visual detection of larger aspect ratio vehicles, as well as they changed the architecture of the detection system. They also worked on the lane assignment of these objects that are not directly on top of the lane, as well as on the tracking, filtering of objects moving laterally, compared to our vehicle.

Now, that was a limitation at that time on this project to detect cross traffic, assuming at this time due to the limitations of the system is challenging.

- Are you specifically aware of how the Autopilot Team went about specifically labeling, after our crash, specifically labeling tractor trailers and these larger objects that may be on the roadway? Like how is it they went about doing that?
- My understanding is they boosted the neural net with images or videos from the side of the trucks in

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order to attempt to farther assist the driver in these situations, even though they were into the limitations of the system. And they did that by retrieving fleet data and manually labeling those videos up until the neural net started automatically labeling those.

- I think you used the term boost the system; is that what you said?
- I was referring to add images or videos to the neural net.
- I guess, is that a term that you-all Q. use or just -- like, what does that mean? Does that mean just uploading a bunch of photos or images of the same thing to kind of accelerate the learning process? Is that what that means?
- No, it's not as is you're describing it. What I'm talking is about, instead of boosting, say improve or add material to the training set that the neural net counts on in order to perform the visual detection. Which is only, again, the first step of the Autopilot control.
- Right. But you would agree with me that obviously if you don't have the first step, then the next couple of steps to actually identify and react aren't going to happen, right? Firsts you need to label that object; you would agree with that?

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First you need the visual detection and you need a constant visual detection in order to track a vehicle. But even if you have that, there's the challenge of filtering and tracking that vehicle or that object traveling laterally. And that is one of the limitations of the system and that's why we need a driver engaged that will take action in those scenarios.

So sticking with the labeling after our Q. accident that we kind of started to touch on, do you know how that's physically done? And what I mean by that is, is it simply thousands upon thousands of images or videos that they upload to the neural net? Is it fleet learning where they drive around tractor trailers or larger objects?

Like, how is it physically done, if you know? Obviously I don't.

Absolutely. So it's a progressive or step-by-Α. step process which starts by manually labeling videos or images that comes from vehicles and then setting a trigger for other vehicles to send data when they have a similar image on their cameras read.

And then as you keep manually labeling, the neural net starts automatically labeling and detecting these objects. As well as changing the architecture of the visual detections. It wasn't only to add images or

videos to the neural net, we also changed the neural net 1 2 or the visual detection architecture to be able to 3 detect larger aspect ratio vehicles that you wouldn't

expect to encounter in a limited access road.

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Is that process of manually labeling or pulling images from fleet vehicles and labeling those objects, is that time intensive or does that require a lot of manpower to accomplish?

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Α. I don't have information about the specific manpower required.

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Okay. As far as the time, if you know, is it -- and I'm just going to throw an example out there just to illustrate the point I'm trying to make. Can I upload a bunch of photos and the neural net learns what that object is in a week, in a day? Does it take

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16 several months?

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process is takes for the neural net to learn what that image is? And then obviously the next step is how to

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react to it. But do you know how long it takes for the

Do you have any idea how long of an actual

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neural net to actually learn what that image is?

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Α. I do not have that information. That depends on the training set that the neural net had at the start time and also how the code will have to change in order to detect large aspect ratio vehicles in this case.

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IN THE CIRCUIT COURT OF THE FIFTEENTH JUDICIAL CIRCUIT IN AND FOR PALM BEACH COUNTY, FLORIDA

CASE NO. 50-2019-CA-009962

KIM BANNER, as Personal Representative of the Estate of Jeremy Banner, deceased,

Plaintiff,

vs.

TESLA, INC., a/k/a TESLA FLORIDA, INC.; FIRSTFLEET, INC. OF TENNESSEE, a/k/a FIRSTFLEET, INC.; and RICHARD KEITH WOOD

Defendants.

VIDEO DEPOSITION OF CHRIS PAYNE, ENGINEER

AUGUST 3, 2021 11:00 A.M. TO 2:30 P.M.

ALL PARTIES APPEARED REMOTELY
PURSUANT TO
FLORIDA SUPREME COURT ORDER AOSC20-23

REPORTED BY: JENNIFER MCCAUSLAND, CERTIFIED STENOGRAPHER NOTARY PUBLIC, STATE OF FLORIDA



	rayne, Chris 08-03-2021 Rage 8 Or 108
1	Is that correct?
2	A I had three internships; one at Stanford
3	linear accelerator; one at Green Mountain Power; and one
4	at Lockheed Martin Technologies.
5	Q And they were while you were still a student
6	at Princeton?
7	A Correct, but they were in relevant fields.
8	Q What was your first job at Tesla?
9	A My first job was as a firmware engineer.
ĽÖ	Q And step us through the different jobs that
11	you have had at Tesla, the different positions, up to
12	your current position as autopilot engineer.
L 3	A Sure. I was two years as a firmware engineer
Ŀ4	and then I interviewed with the autopilot division,
L5	which was founded, I believe, around late 2014/2015
L6	where I joined as an autopilot engineer initially
L7	focused on simulation.
18	I, then, over time, worked throughout the
L9	controls, planning and vision stacks. I went from being
20	an engineer to a senior engineer to a staff engineer,
21	which I am today.
22	Q Okay. Who do you report to, sir?
23	A I report to the director Ashok Elluswamy.

How do you spell that, please?

A-s-h-o-k; E-l-l-e-s-m-y, close to that.



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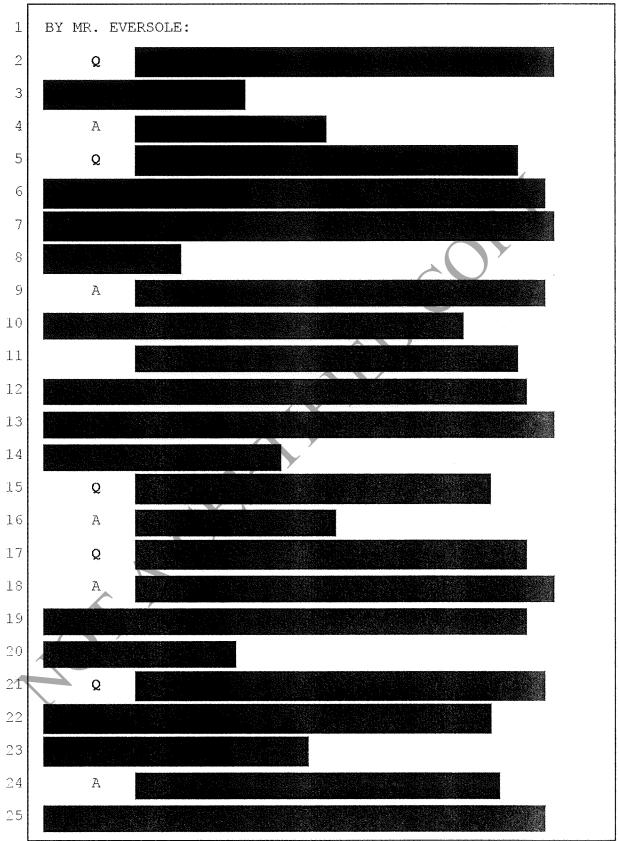
Q

•		
1		(SIC: Elluswamy)
2	Q	First name is Ashok?
3	A	Ashok; A-s-h-o-k.
4	Q	Ashok. Okay. I will mispronounced that
5	throughout	. I will apologize ahead of time.
6	A	That is okay.
7	Q	Now, he is one of the directors of the
8	autopilot	program, is he not?
9	A	Correct.
LO	\mathbf{Q}^{r}	And there are four directors of the autopilot
11	program at	t the present time?
12	A	Three to four. One of them does it part-time.
13	Q	Okay. How about Mr. Moore, is he
14	Α .	He is not currently the director.
L5	Q	Okay. Kovac?
16	A	Yes.
17	Q.	Andrej?
18	A	Andrej Karpathy is a director.
19	Q	So let's go back through that. How many
20	directors	are there in the autopilot program?
24	A	The other director is Silvio Brugada. He is
22	the one wh	no is part-time. He splits his role.
23	Q	Okay. Is any one of the directors the lead
24	director,	if you will, in charge of the other directors?
25	A	No.











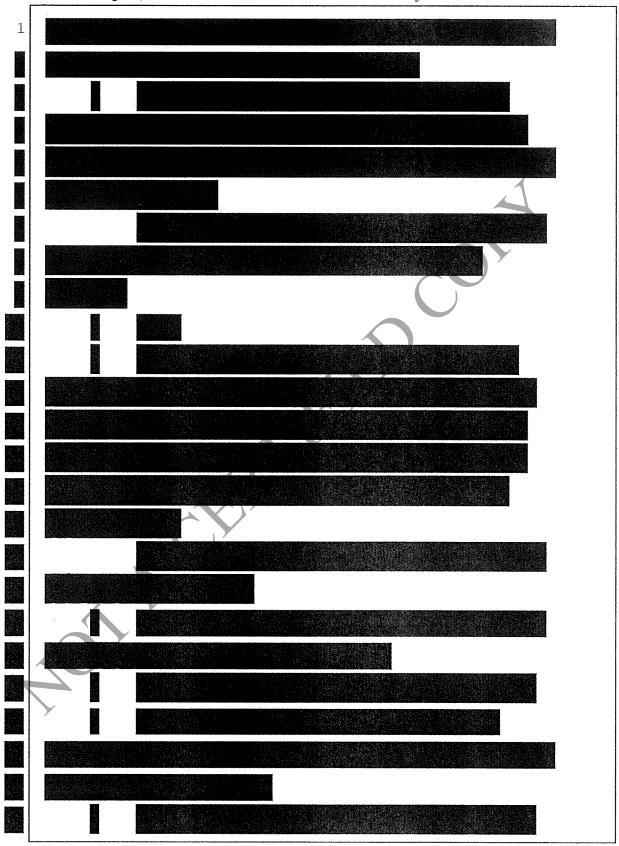








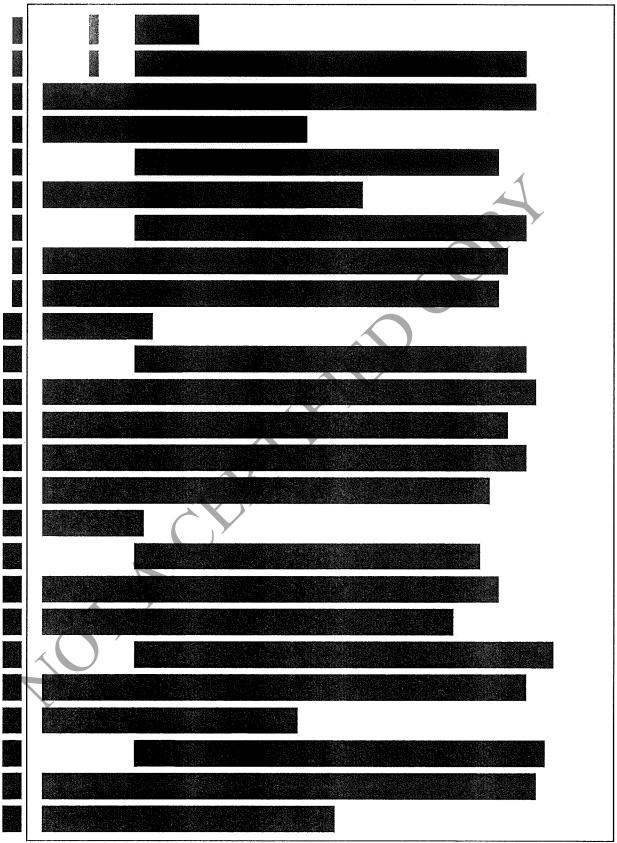




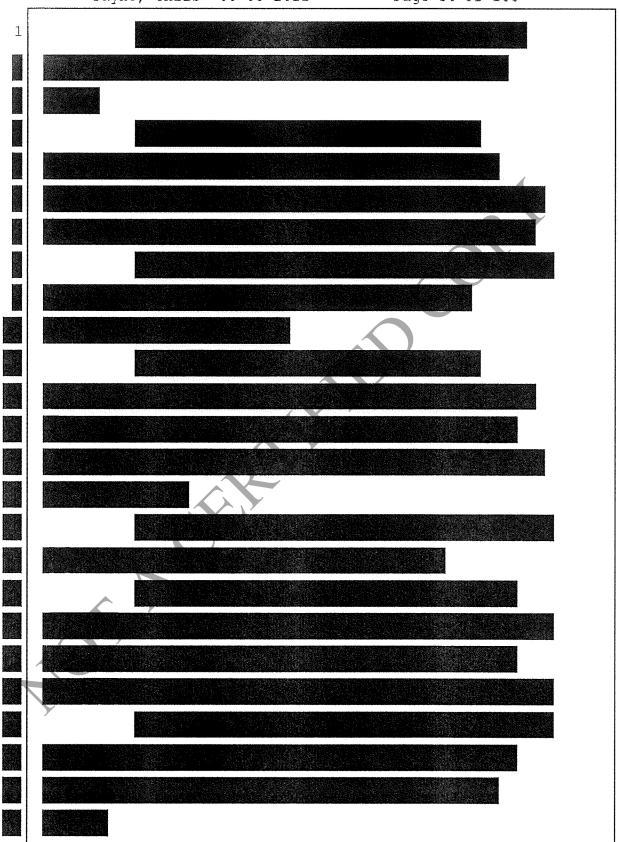




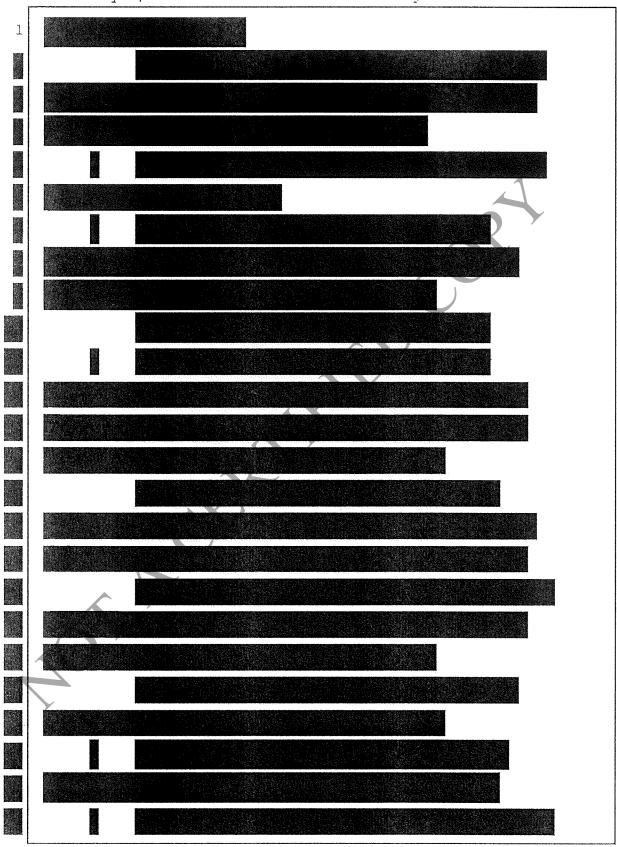




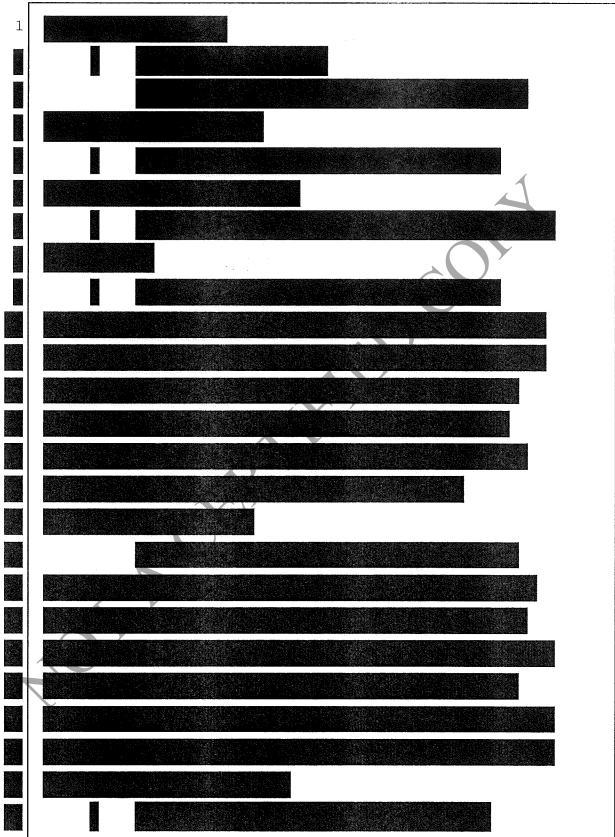














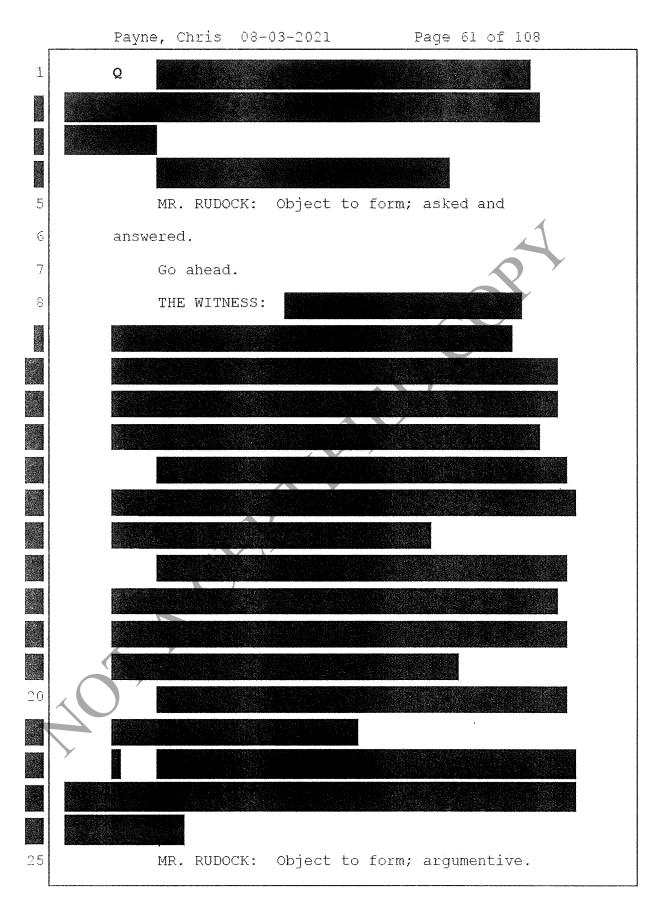
















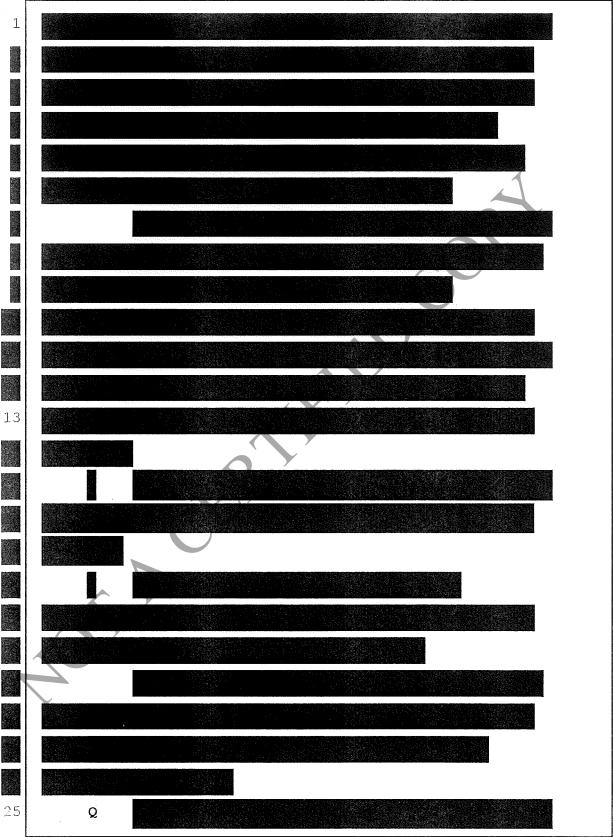
































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4	MR. RUDOCK: Objection to the form;
5	argumentive; speculative.
6	Go ahead.
7	THE WITNESS:
16	Most of the questions are for other areas. I
17	don't want to waste your time with them.
18	A Sure.
19	Q Do you own a Tesla?
20	A I do not, but I drive an engineering one every
21	day.
22	Q A free one.
23	Have you written any articles, published any
24	articles in SAE Journal, anything like that, on
25	autopilot?



IN THE CIRCUIT COURT OF THE 15TH JUDICIAL CIRCUIT COURT IN AND FOR PALM BEACH COUNTY, FLORIDA

CASE NO. 50-2019-CA-009962 (AB)

KIM BANNER, as Personal Representative of the ESTATE OF JEREMY BANNER, deceased,

Plaintiff,

VS.

TESLA, INC. a/k/a TESLA FLORIDA, INC., FIRSTFLEET, INC. OF TENNESSEE a/k/a FIRSTFLEET, INC., and RICHARD KEITH WOOD,

Defendants.

VIDEOTAPED DEPOSITION OF RICHARD BAVERSTOK

TAKEN ON BEHALF OF THE PLAINTIFF

AUGUST 12, 2021 10:00 A.M. TO 11:16 A.M.

ALL PARTIES APPEARED REMOTELY
PURSUANT TO
FLORIDA SUPREME COURT ORDER AOSC20-23

REPORTED BY: BRANDY SPOUTZ, COURT REPORTER NOTARY PUBLIC, STATE OF FLORIDA







1	Q	(By Mr. Eversole)
2		
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4		
5	А	
6	Q	
7	A	
8	Q	
9	A	
10	Q	Do you have human factors? Is that part of
11	your job,	human factors?
12	А	Can you explain what you mean by human
13	factors?	
14	Q	Okay. Human factors with regard to the
15	utilizati	on of your systems, how does human factors play
16	a part, p	lay a role?
17	A	I don't understand what you mean by human
18	factors.	
19	Q	Do you have any training, formal training or
20	education	, in human factors?
21	A	I still don't understand what you are
22	referring	to by human factors.
23	Q	Do you know what human factors are?
24	A	I'm asking for your definition so I understand
25	what you	are asking.







IN THE CIRCUIT COURT OF THE 15TH JUDICIAL CIRCUIT IN AND FOR PALM BEACH COUNTY, FLORIDA

CASE NO.: 50-2019-CA-009962 (AB)

KIM BANNER, as personal representative of the ESTATE OF JEREMY BANNER, deceased,

Plaintiff.

VS.

TESLA, INC., a/k/a TESLA FLORIDA, INC., FIRSTFLEET, INC OF TENNESSEE a/k/a FIRSTFLEET. INC., and RICARD KEITH WOOD.

Defendants.

VIDEO ZOOM DEPOSITION OF ASHOK ELLUSWAMY

SEPTEMBER 14, 2021 12:16 P.M. TO 2:56 P.M.

REMOTELY VIA ZOOM
PURSUANT TO FLORIDA SUPREME
COURT ORDER AOSC20-23

REPORTED BY:
RHEANNA G. POPLAR
STENOGRAPHIC REPORTER AND
NOTARY PUBLIC, STATE OF FLORIDA



1 Α. Good morning. 2 What is your full name, sir? Q. My full name is ****Ashok Kumar Elluswamy. 3 Α. Elluswamy, did I pronounce that correctly? 4 Q. 5 Α. That's correct. What is your profession? 6 Q. I work at Tesla in the autopilot team. 7 Α. I work 8 on software development. Okay. You're an engineer? 9 Q. Currently, I'm a 10 Α. Yeah, I've been an engineer. 11 director at Tesla. 12 Q. You're an editor? Currently, I'm a director. 13 Α. Oh, director. I'm sorry. 14 Q. 15 Α. Yeah. 16 All right. Are you a professional engineer, Q. do you have a PE license? 17 I'm not sure what a PE license is. 18 Well, a professional engineer has a -- a stamp 19 20 that they can sign and -- and they can certify the documents are -- it's a legal -- it's a legal engineering type thing, but if you don't have it. You 22 23 would -- you would know if you had it. It's a national 24 recognition for engineers.

Yeah, I don't think I have such things.

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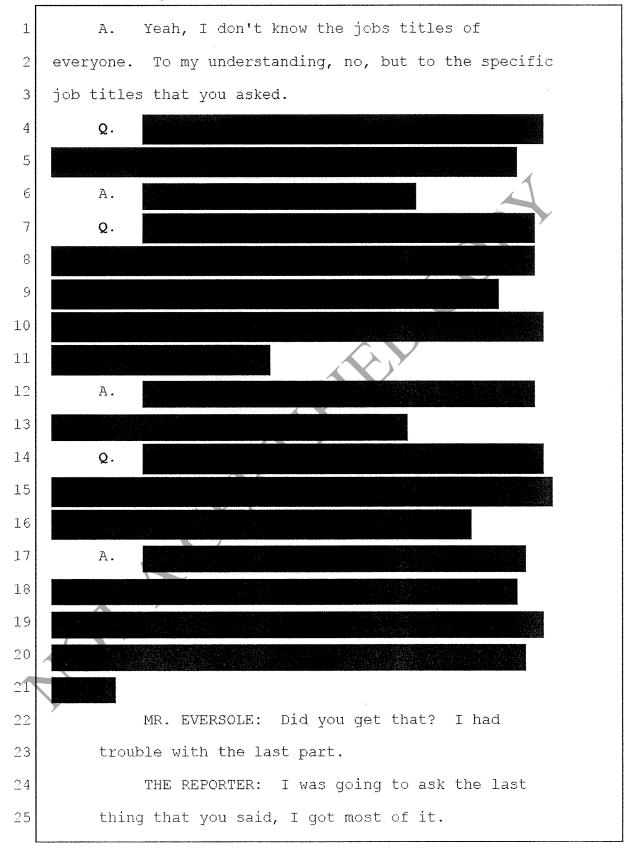
Α.





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2	(Reporter clarification.)
3	THE WITNESS:
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7	BY MR. EVERSOLE:
8	Q. Before March 1st of 2019 was you were not a
. 9	director in March of 2019, were you?
10	A. I was not.
11	Q.
12	
13	A.
14	
15	Q. Okay. Were there directors at that time that
16	who have left Tesla or who are no longer directors in
17	I say, we're in March of 2019?
18	A. Can you please repeat the question?
19	Q. Sure. Is there anyone that was a director in,
20	let's say, as of March 1, 2019, that is no longer a
21	director?
22	A. I believe the question again, the question was
23	someone was director on March 2019, but they're no
24	longer a director. Is that the question?
25	Q. Yes, sir, if you know.













IN THE CIRCUIT COURT OF THE FIFTEENTH JUDICIAL CIRCUIT IN AND FOR PALM BEACH COUNTY, FLORIDA

CASE NO. 50-2019-CA-009962 (AB)

KIM BANNER, as Personal Representative of the ESTATE OF JEREMY BANNER, deceased,

Plaintiff,

VS.

TESLA, INC. a/k/a TESLA FLORIDA, INC., FIRSTFLEET, INC. OF TENNESSEE a/k/a FIRSTFLEET, INC., and RICHARD KEITH WOOD,

Defendants.

DEPOSITION OF ANDREJ KARPATHY

TAKEN ON BEHALF OF THE PLAINTIFF

OCTOBER 29, 2021 11:02 A.M. TO 5:02 P.M.

ALL PARTIES APPEARED REMOTELY
PURSUANT TO
FLORIDA SUPREME COURT ORDER AOSC20-23

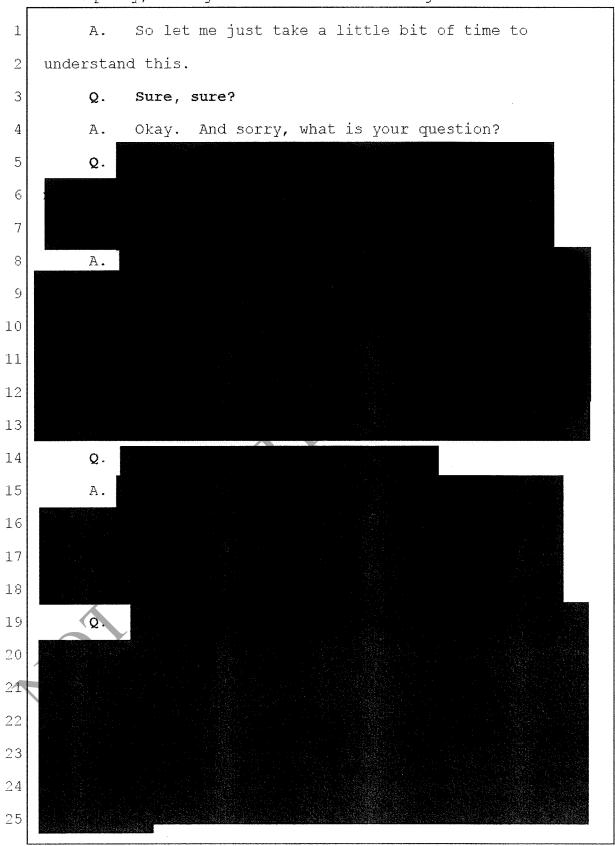
Reported By: CHERYL L. WILSON, Court Reporter Notary Public, State of Florida





,	
1	Q.
2	
3	A.
4	Q.
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6	Α.
7	
8	Q.
9	
10	A.
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14	Q. Okay. Let's see here now, the let's go
15	through some names and ask you if you can tell me the
16	directors. Who now, we'll go back in time in a few
17	minutes, but for now who are the other directors in the
18	Autopilot program?
19	A. So currently it is Ashok Elluswamy and
20	excuse me and Milan, Milan Kovac.
21	Q. Okay. I missed those last two completely. Say
22	again?
23	A. So it's Ashok Elluswamy and
24	Q. I have that one. I know that one. The
25	other







IN THE CIRCUIT COURT OF THE 15TH JUDICIAL CIRCUIT IN AND FOR PALM BEACH COUNTY, FLORIDA

CASE NO. 2019-ca-009962

KIM BANNER, as Personal Representative Of the ESTATE OF JEREMY BANNER, deceased,

Plaintiff,

VS.

TESLA, INC. a/k/a TESLA FLORIDA INC., FIRSTFLEET, INC OF TENNESSEE a/k/a FIRST FLEET, INC., and RICHARD KEITH WOOD,

Defendants.

VIDEOTAPED DEPOSITION OF MILAN KOVAC

TAKEN ON BEHALF OF THE PLAINTIFF

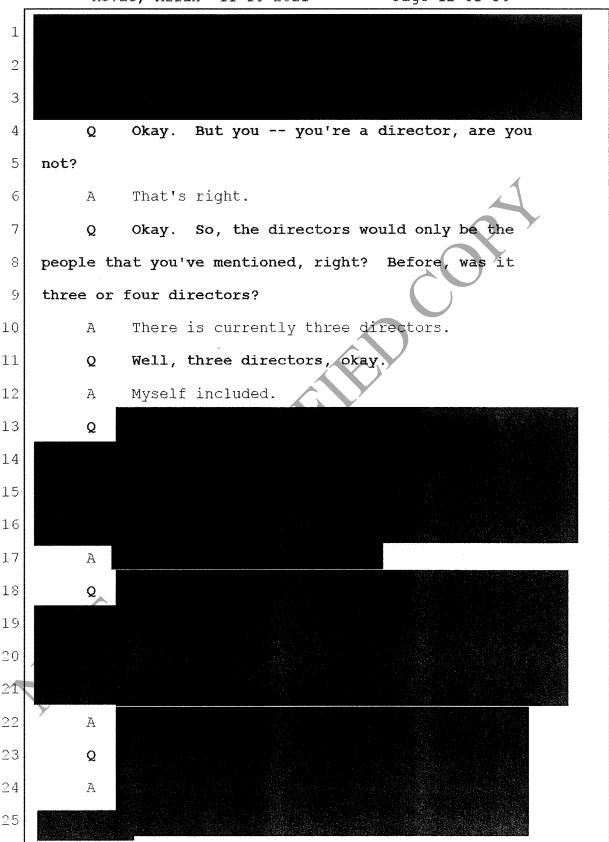
NOVEMBER 10, 2021 11:00 A.M. TO 11:43 A.M.

ALL PARTIES APPEARED REMOTELY
PURSUANT TO
FLORIDA SUPREME COURT ORDER AOSC20-23

EXHIBIT "H"

REPORTED BY: ASHLEY CRAFT, COURT REPORTER NOTARY PUBLIC, STATE OF FLORIDA











IN THE CIRCUIT COURT OF THE 15TH JUDICIAL CIRCUIT IN AND FOR PALM BEACH COUNTY, FLORIDA

CASE NO.: 50-2019-CA-009962 (AB)

KIM BANNER, as Personal Representative of the ESTATE OF JEREMY BANNER, deceased,

Plaintiff,

V.

TESLA, INC., a/k/a TESLA FLORIDA, INC., FIRSTFLEET, INC. OF TENNESSEE a/k/a FIRSTFLEET, INC., and RICHARD KEITH WOOD,

Defendants.

VIDEO DEPOSITION OF ADAM NICKLAS ALEXANDER GUSTAFSSON

TAKEN ON BEHALF OF THE PLAINTIFF

SEPTEMBER 24, 2021 9:00 A.M. TO 10:49 A.M.

ALL PARTIES APPEARED REMOTELY
PURSUANT TO
ELORIDA SUPREME COURT ORDER AOSC20-23

EXHIBIT "I"

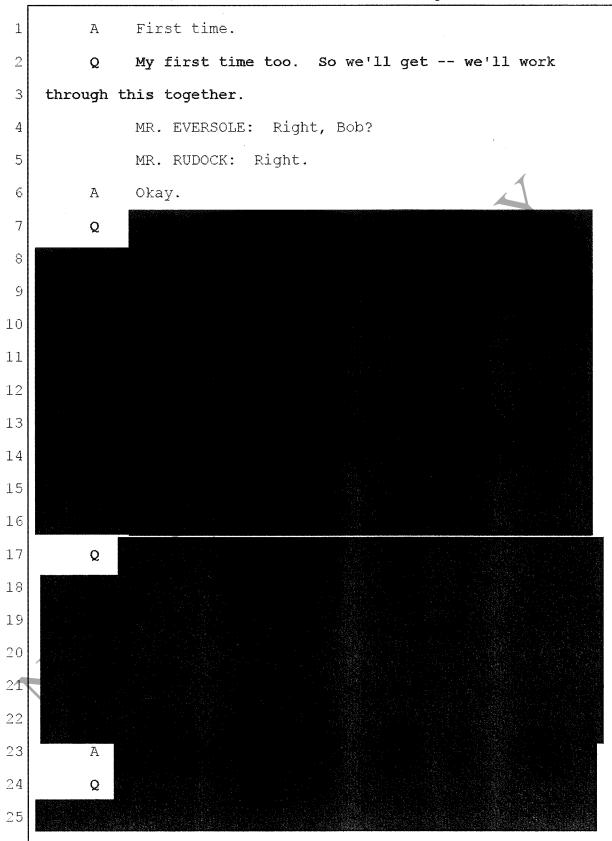
REPORTED BY:
NATALIE PUELLES, FPR, COURT REPORTER
NOTARY PUBLIC, STATE OF FLORIDA





I'm on the autopilot team. Correct. · · 2 Q And what is your specific area? I am a systems engineer; writing software and 3 Α developing functionality for features within the 4 autopilot umbrella, such as automatic emergency braking 5 and forward collision warning. 6 7 Q 8 9 10 A 11 Q 12 A 13 14 15 16 17 18 19 20 21 22 23 Q Okay. Let me ask the question in a better 24 manner. 25 Α Yeah.







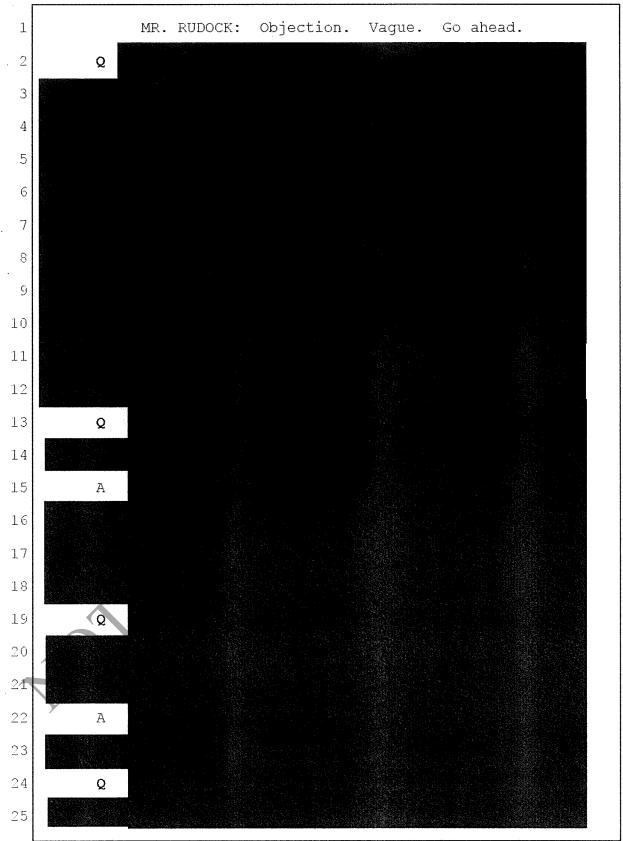








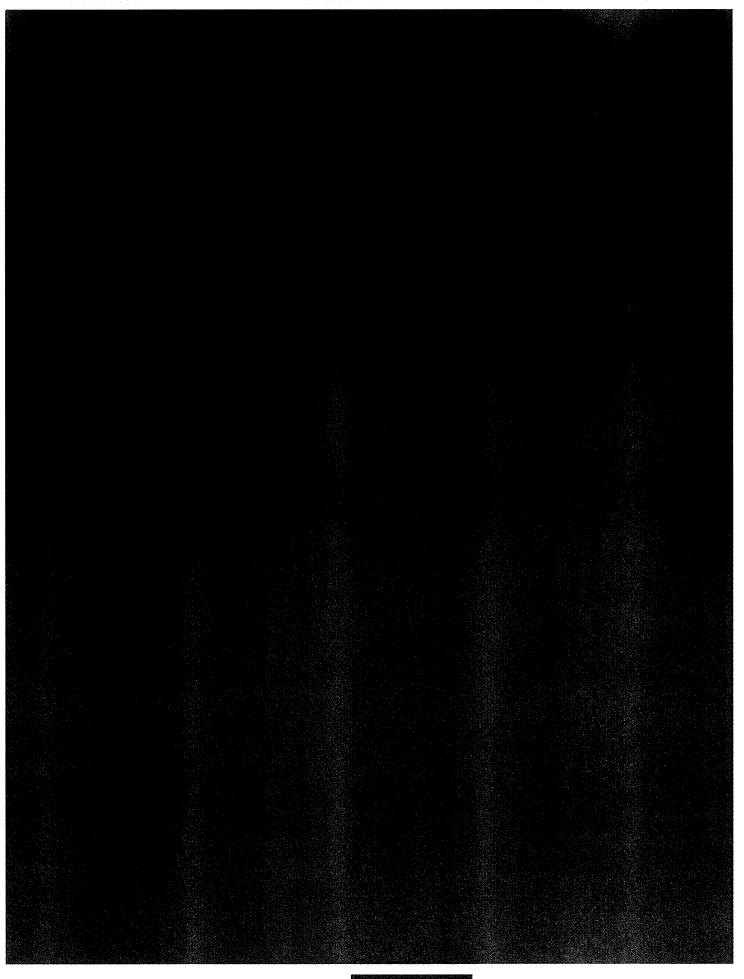




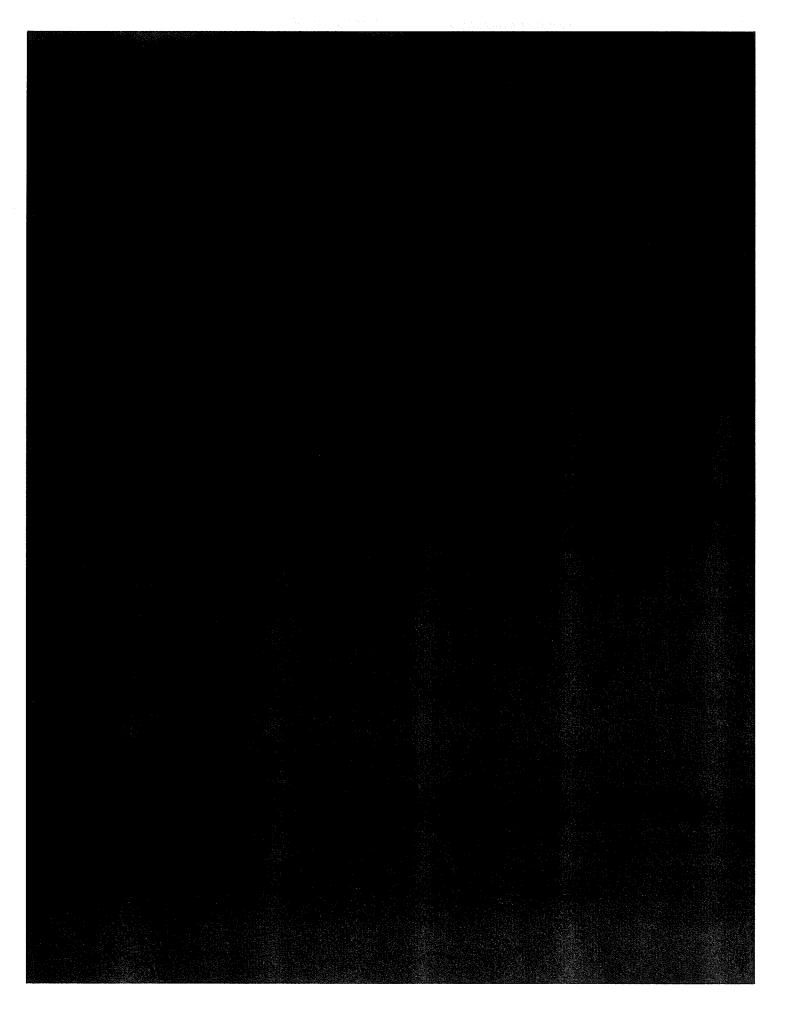


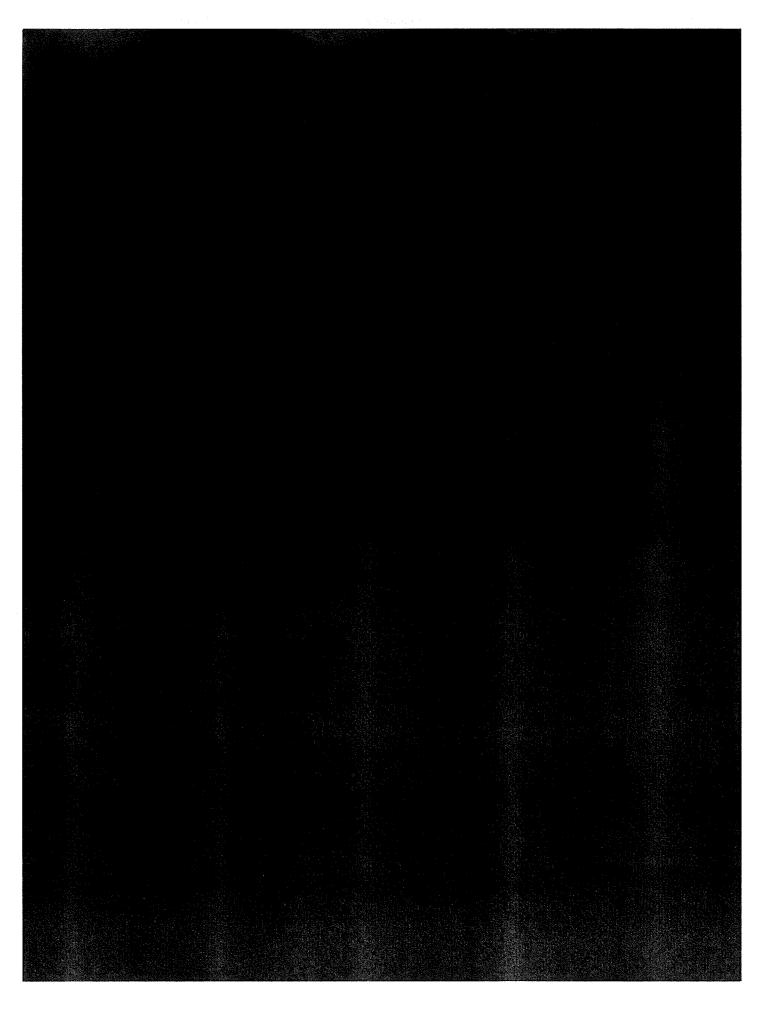


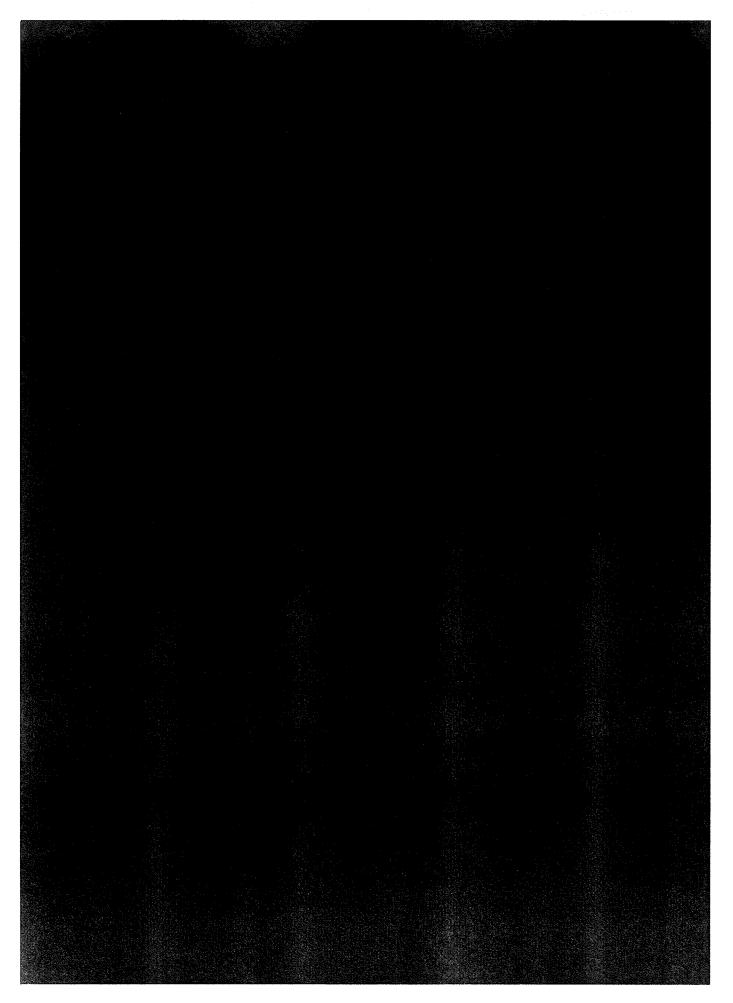


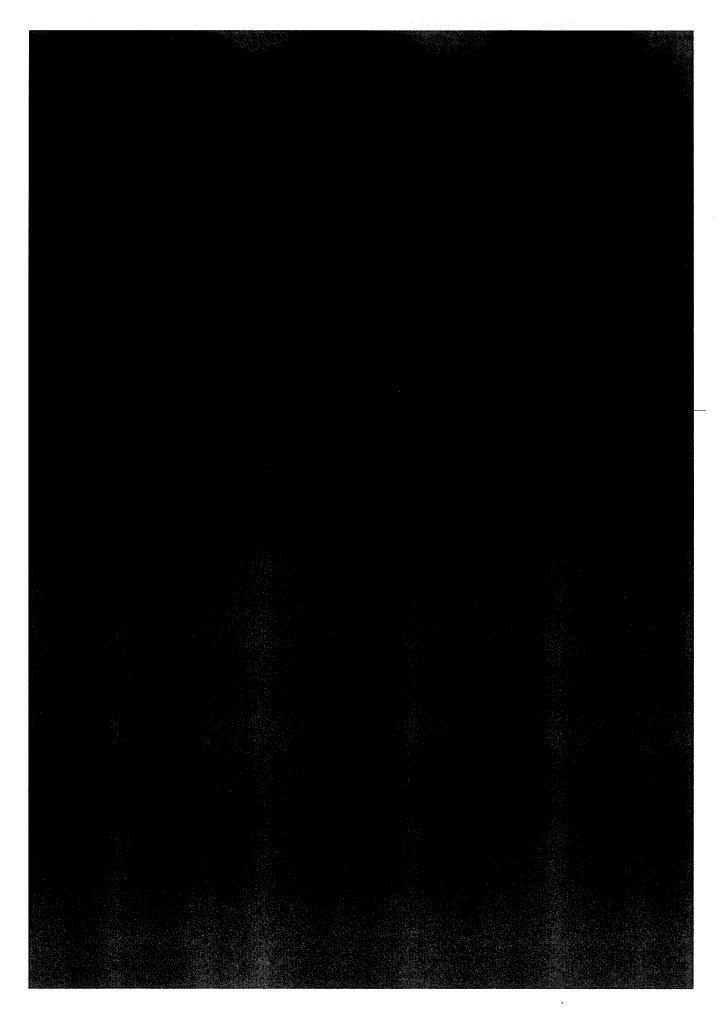


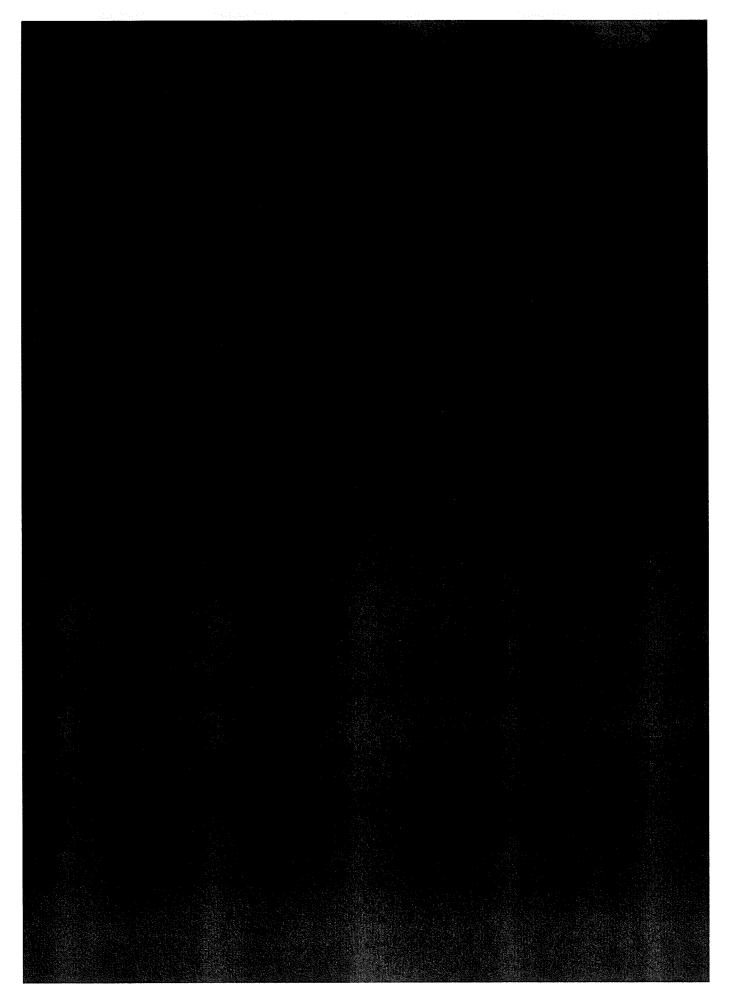
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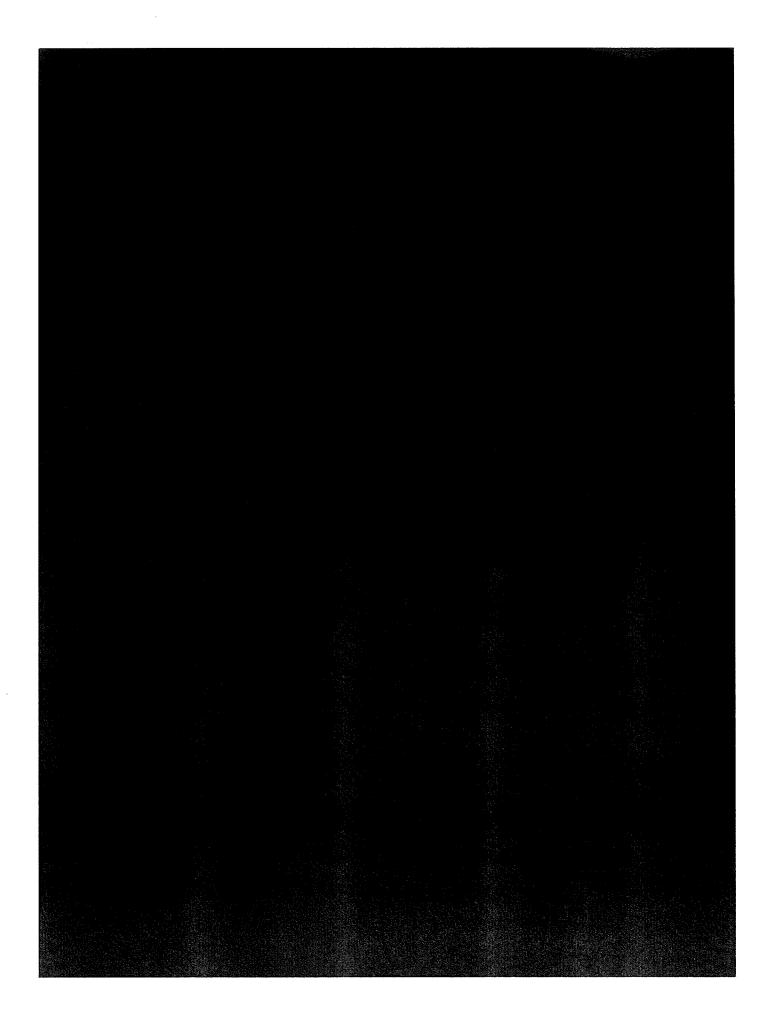


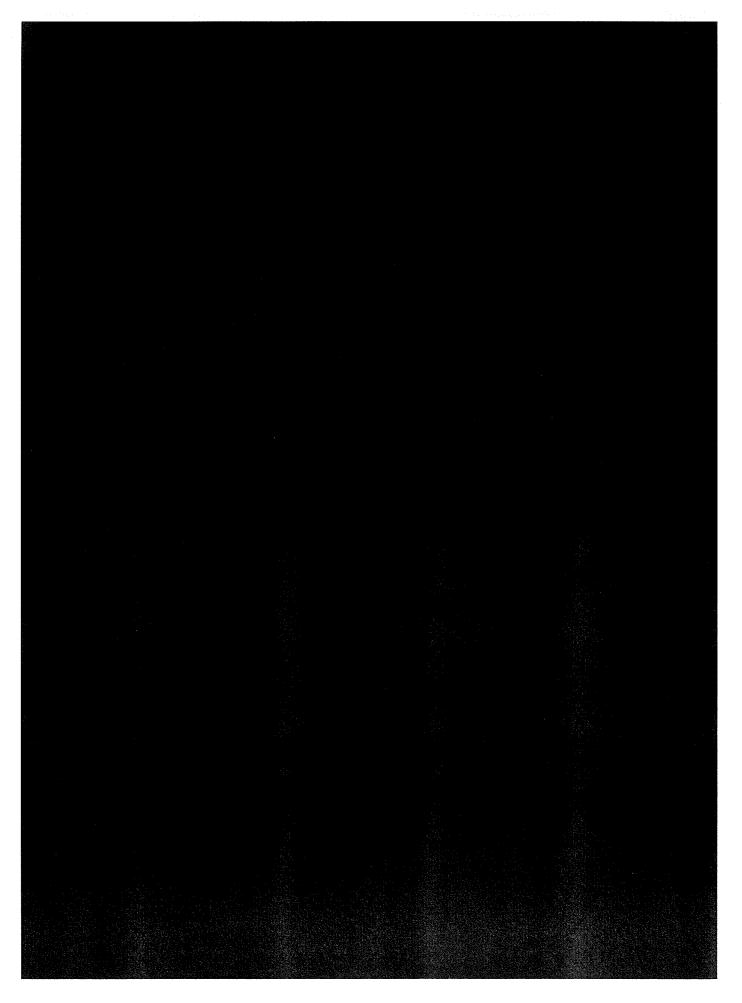


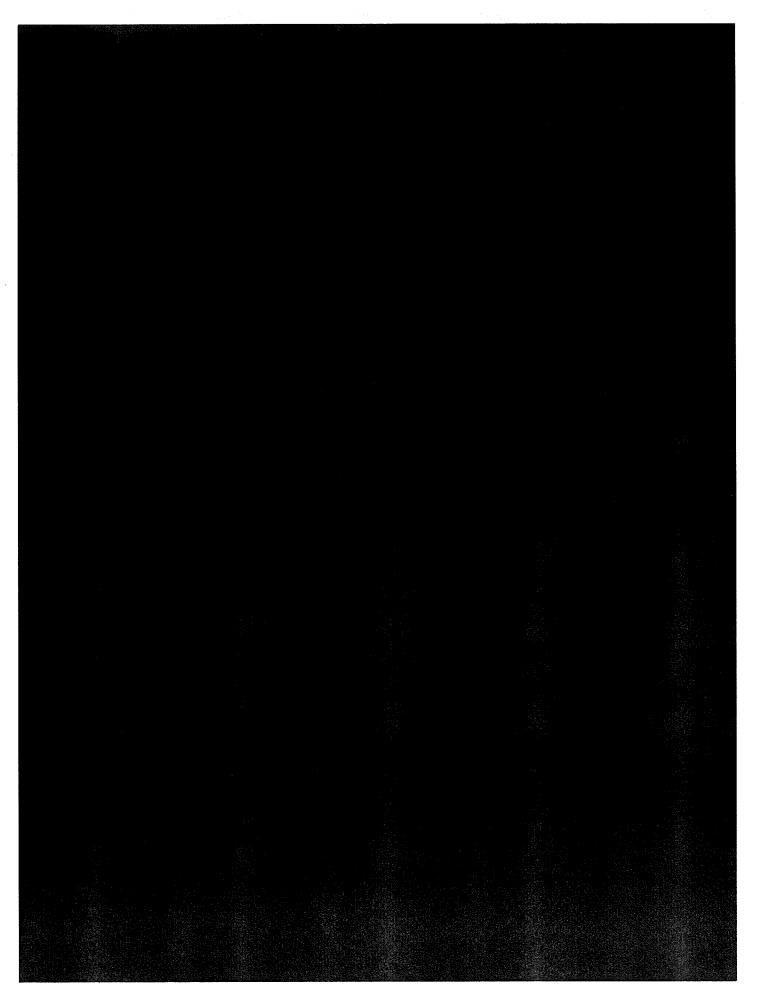


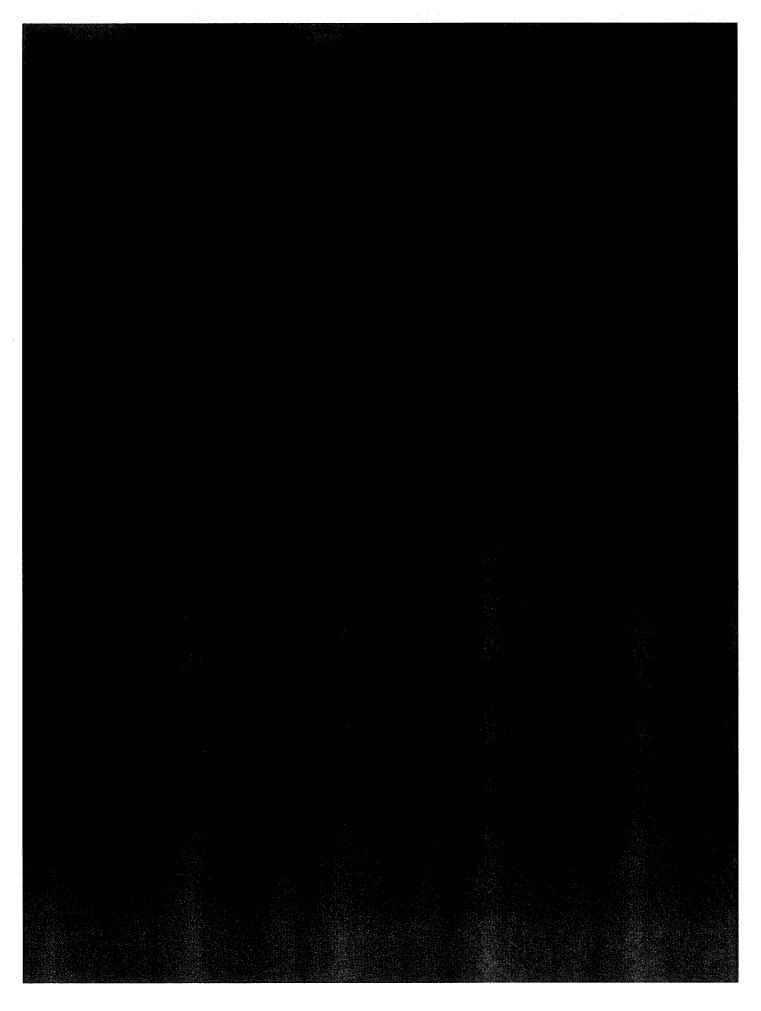


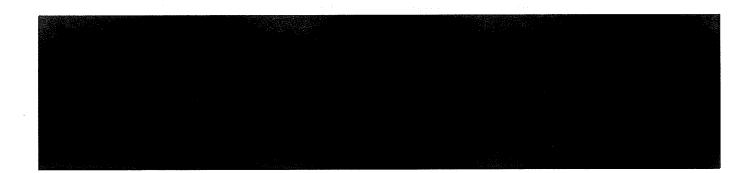


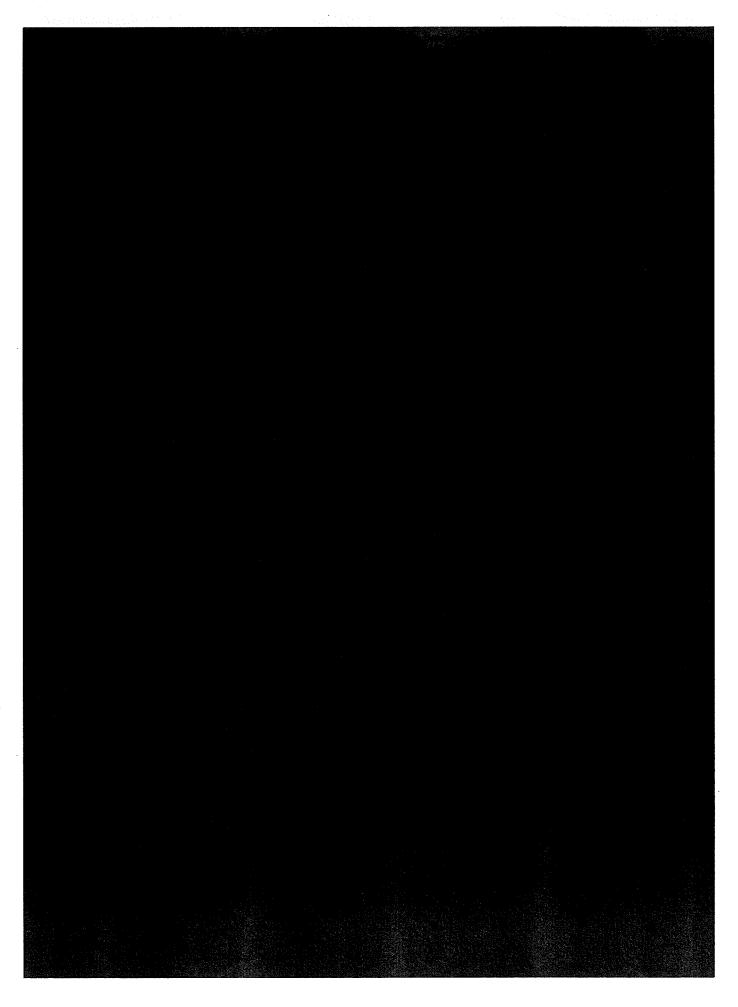


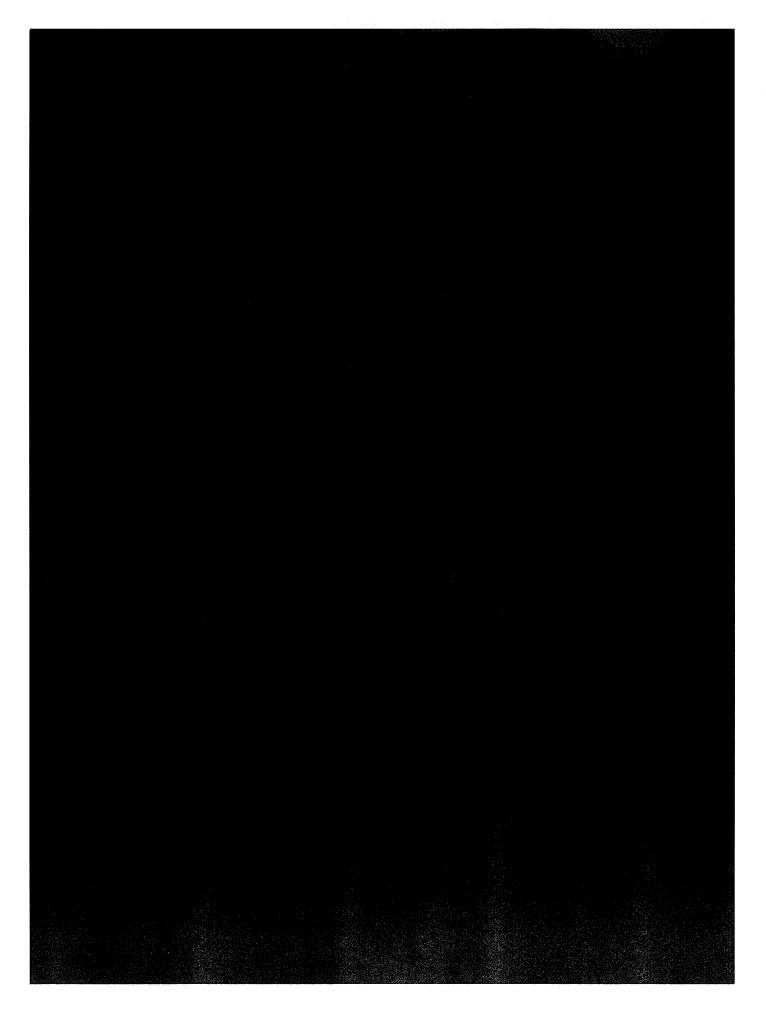


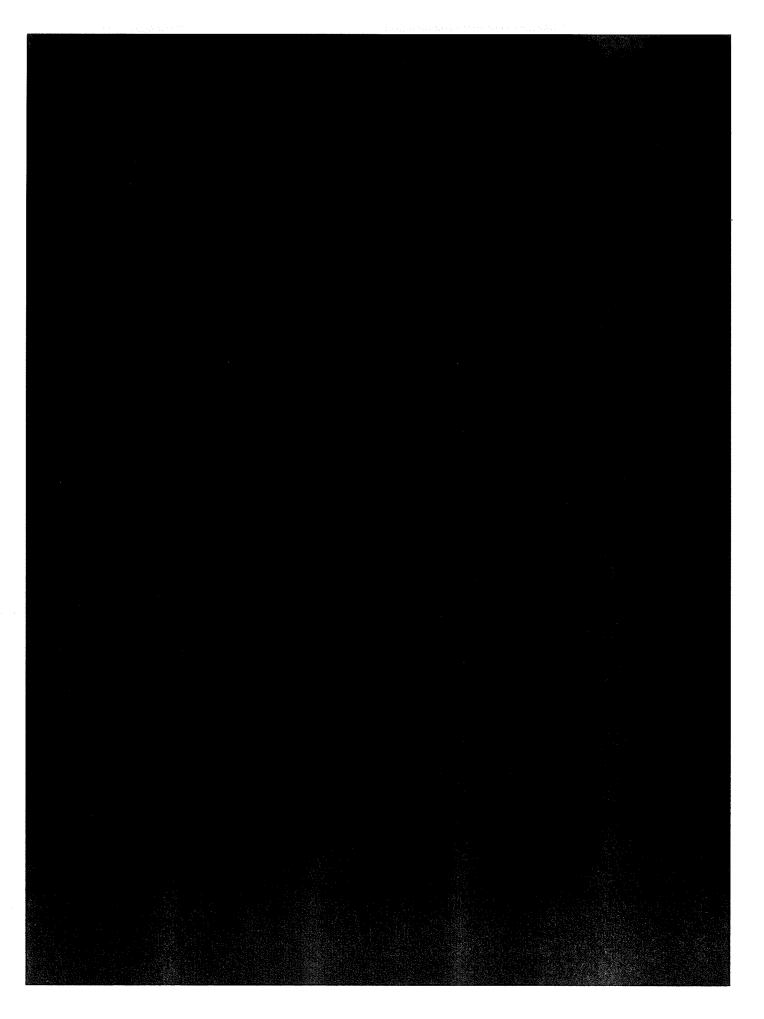


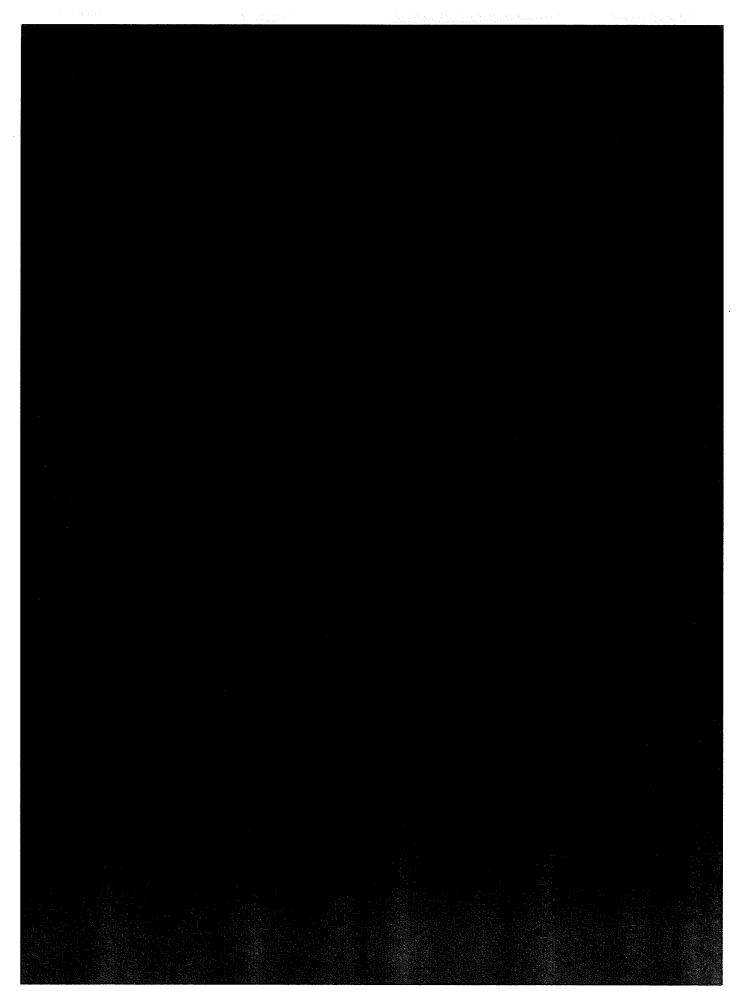


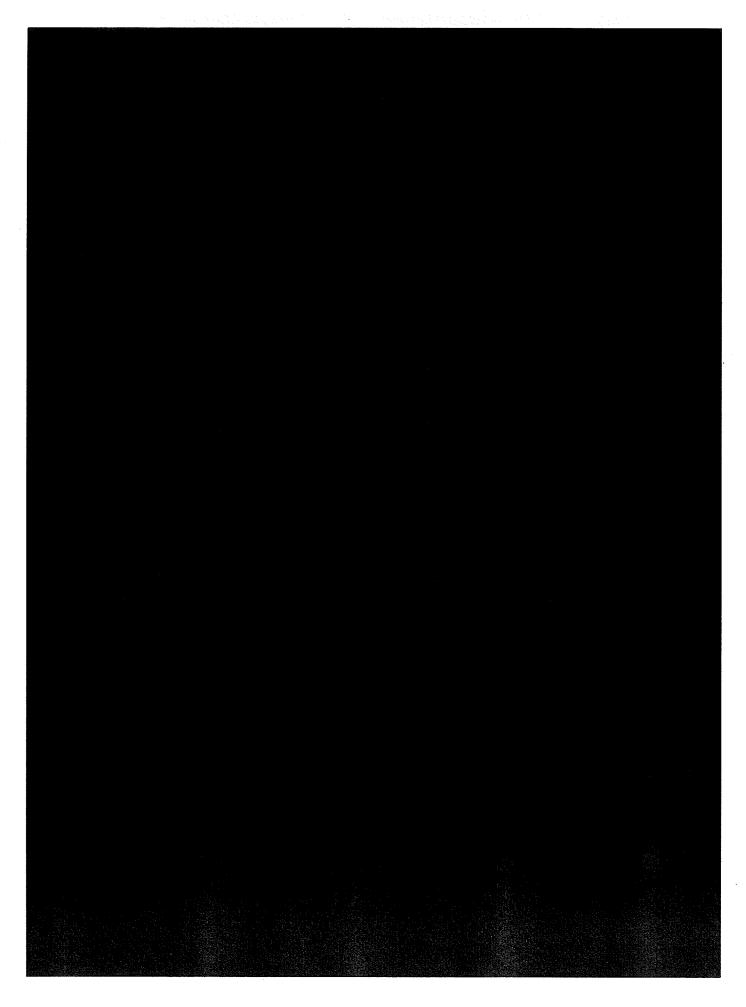


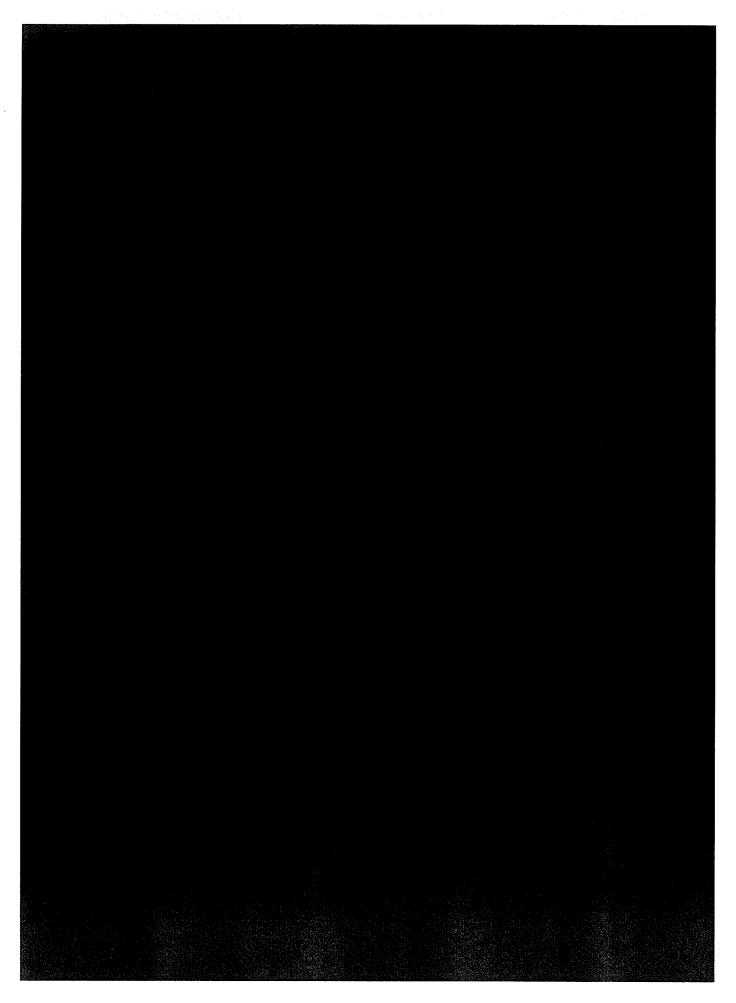




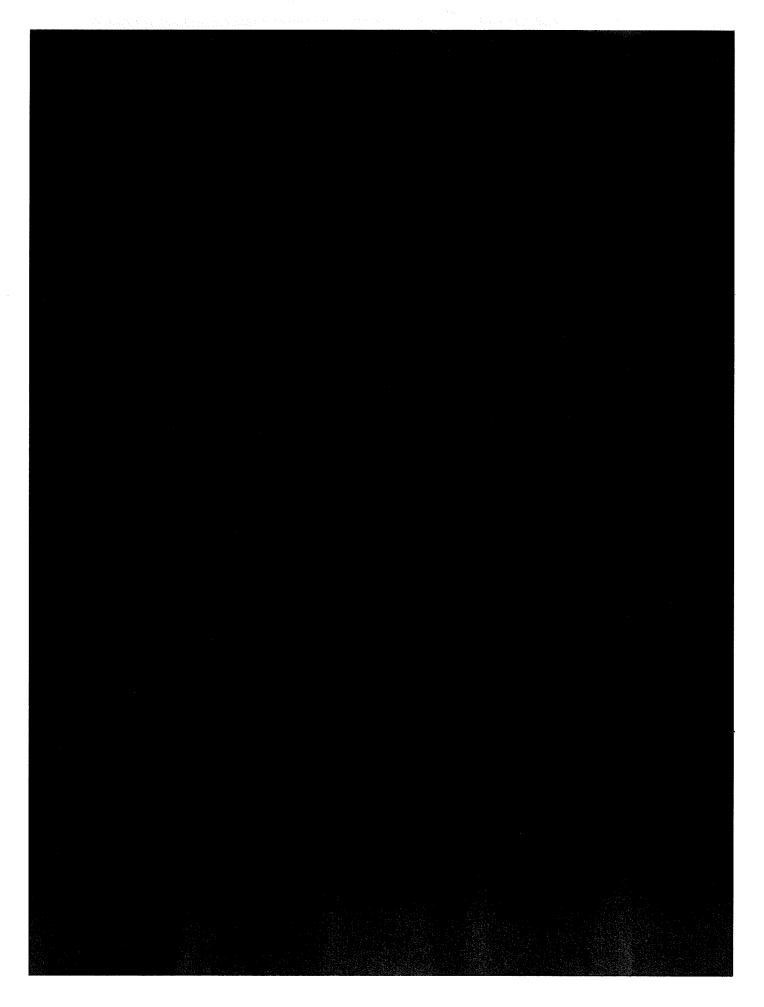


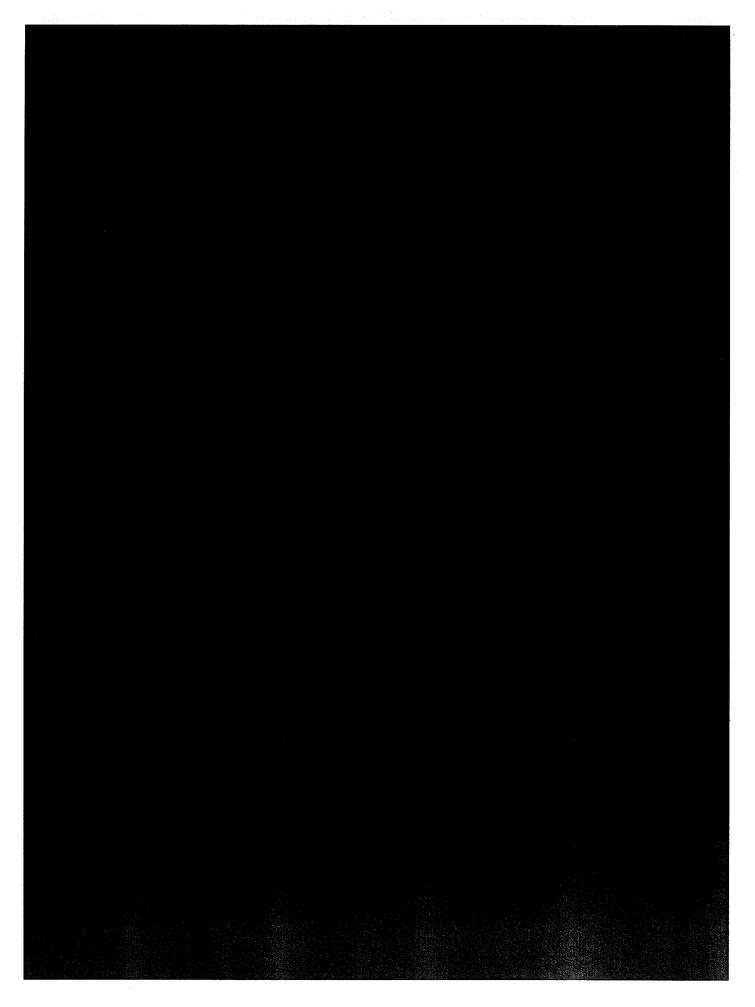






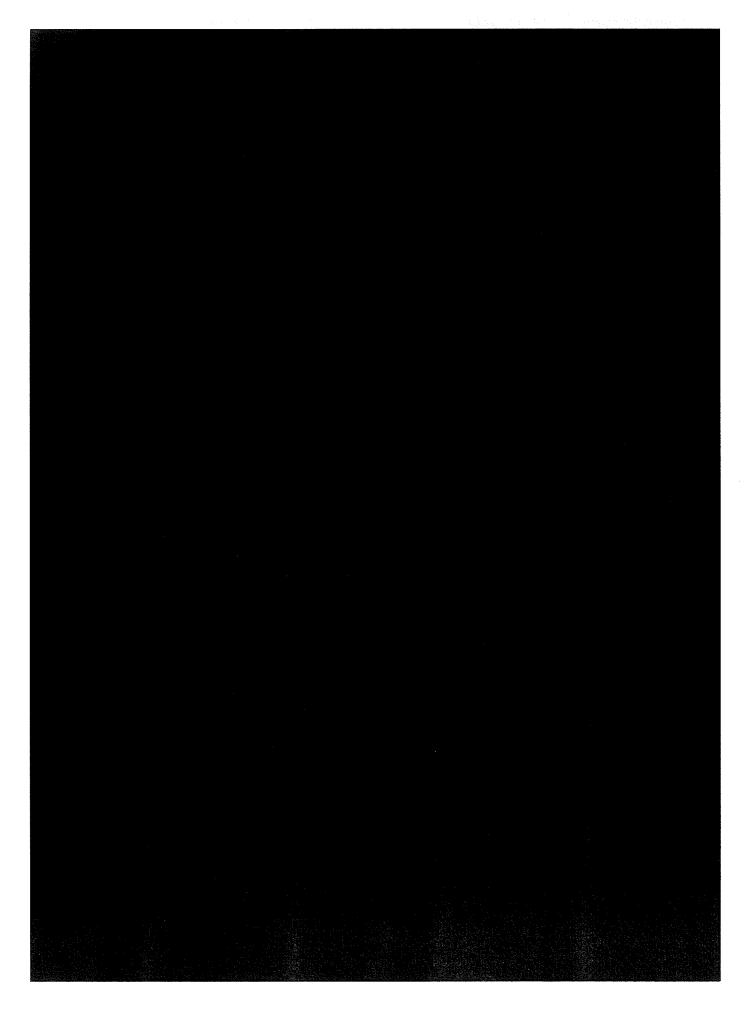


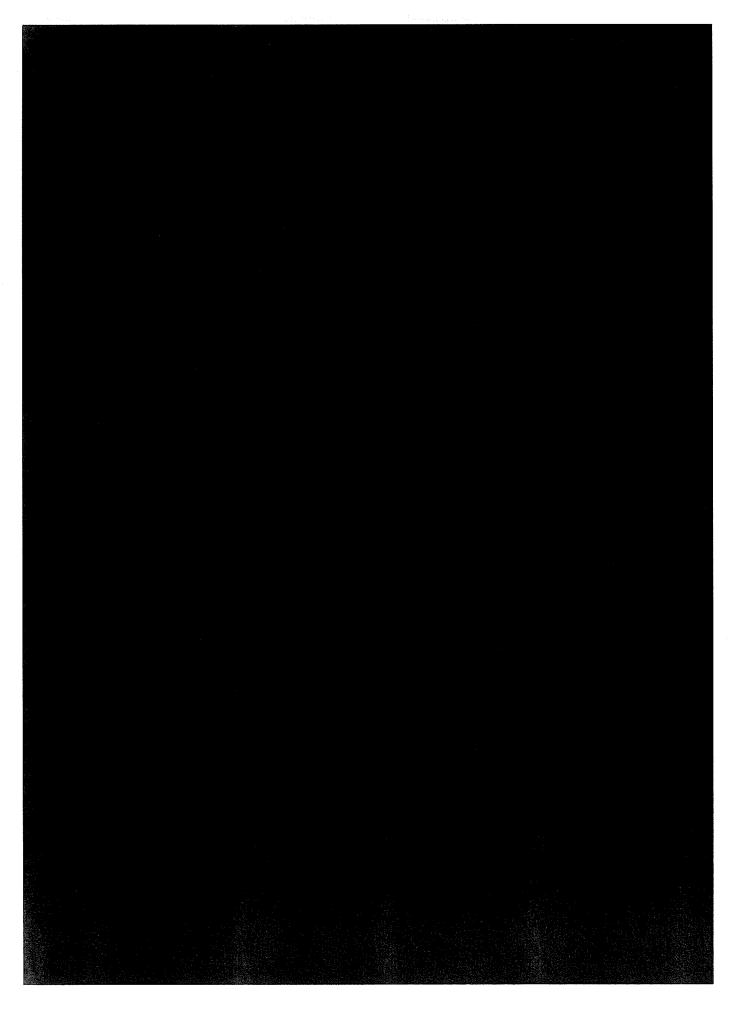


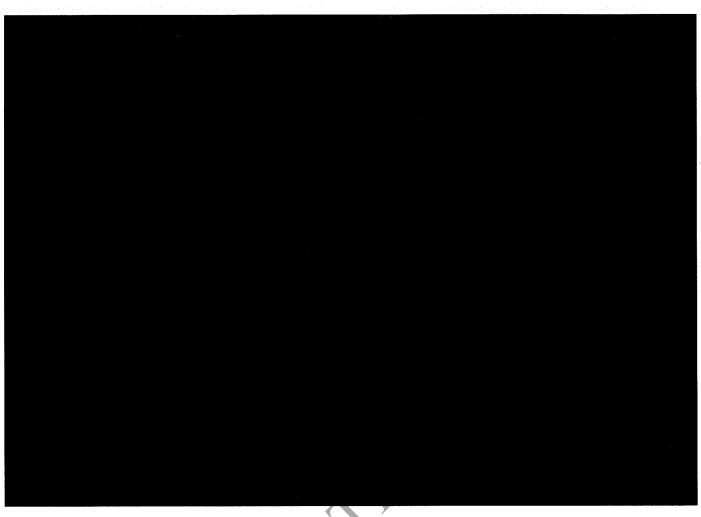


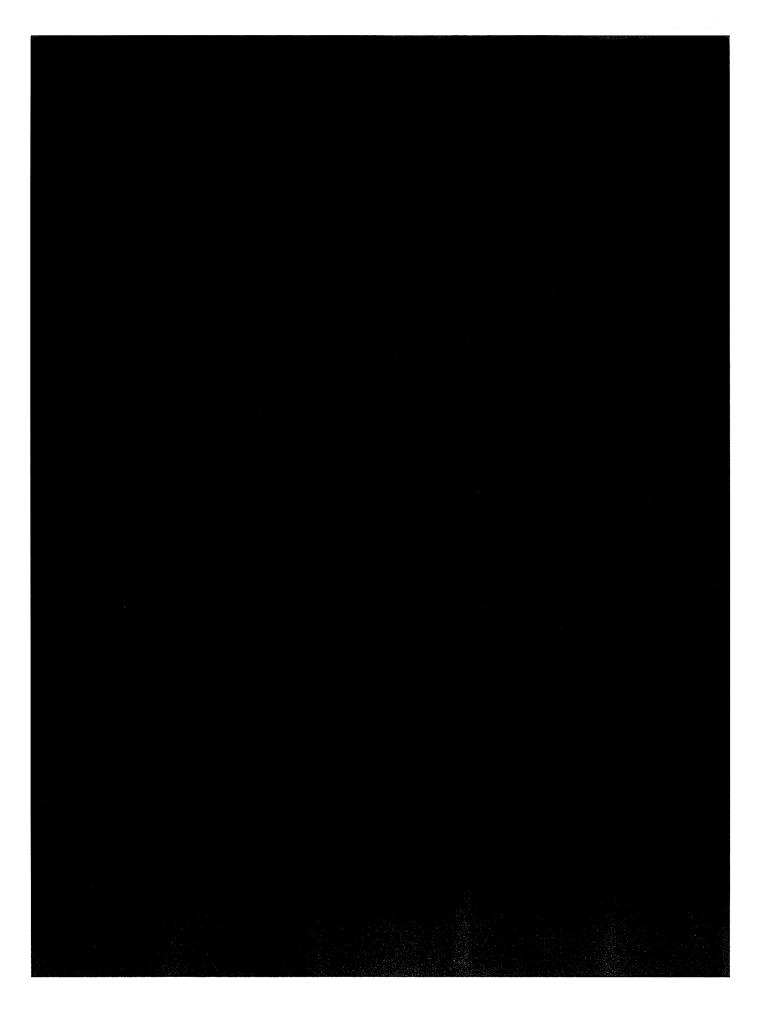


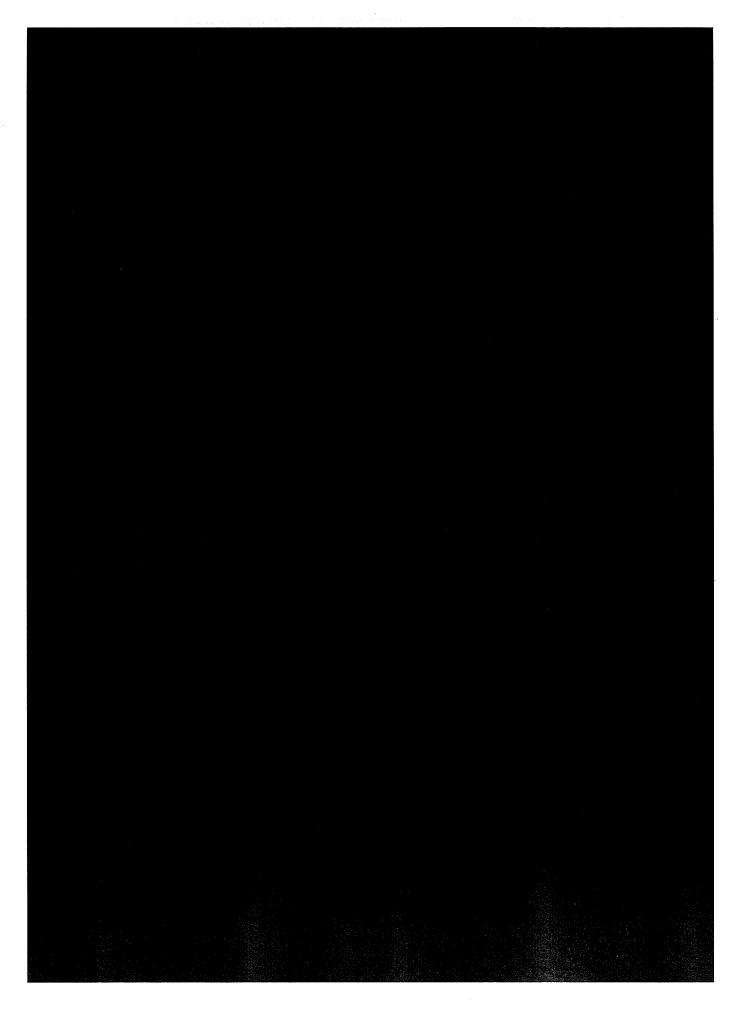


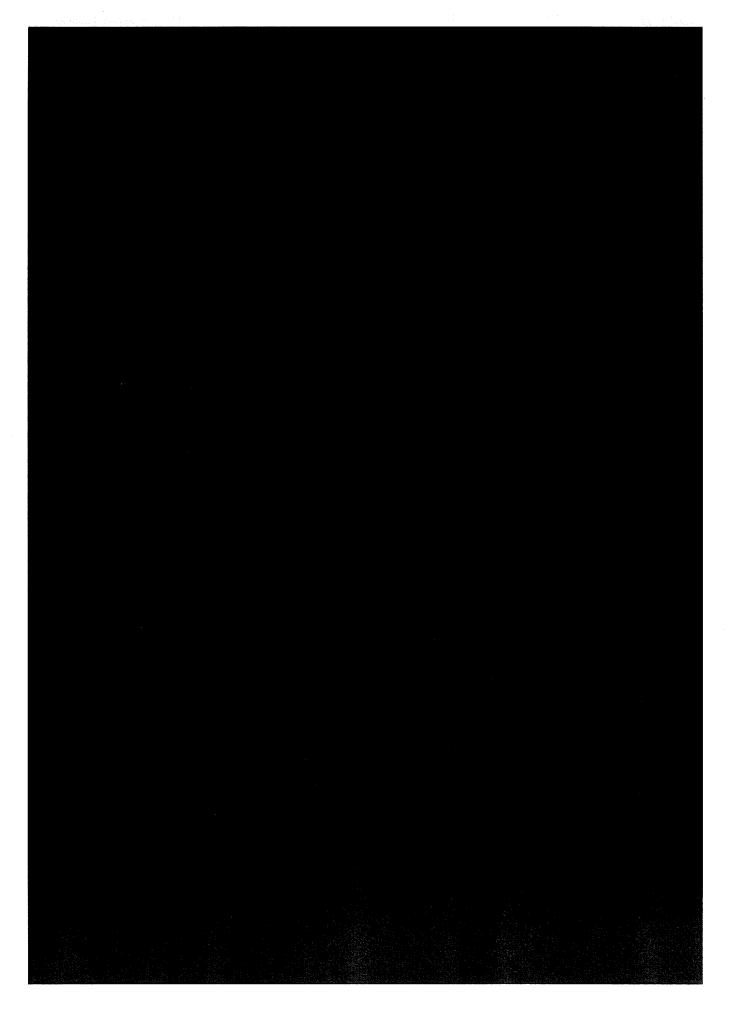


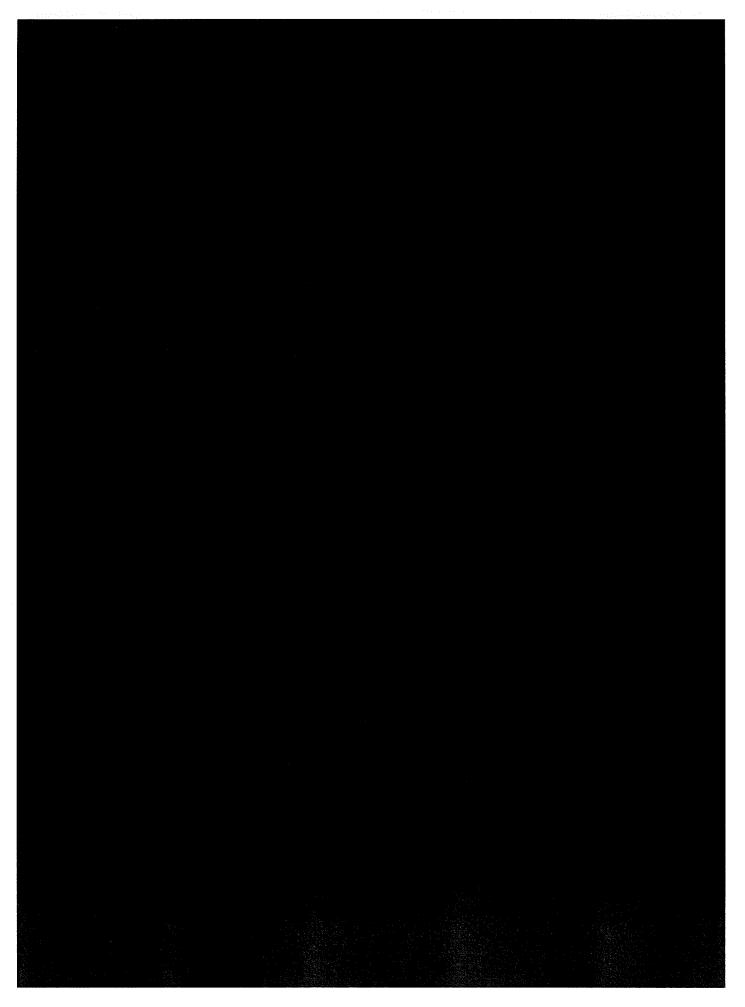


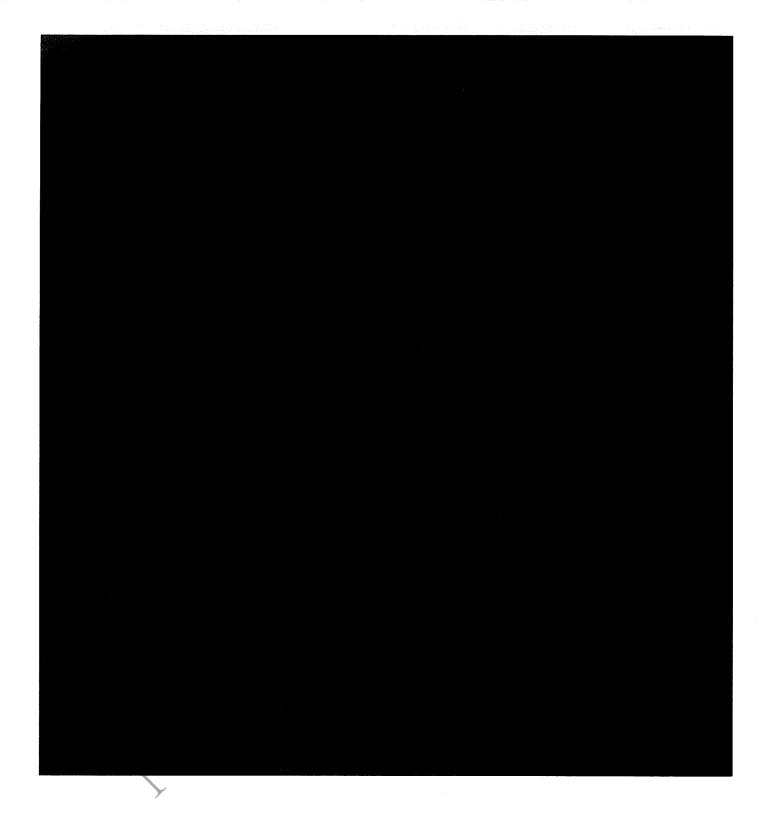


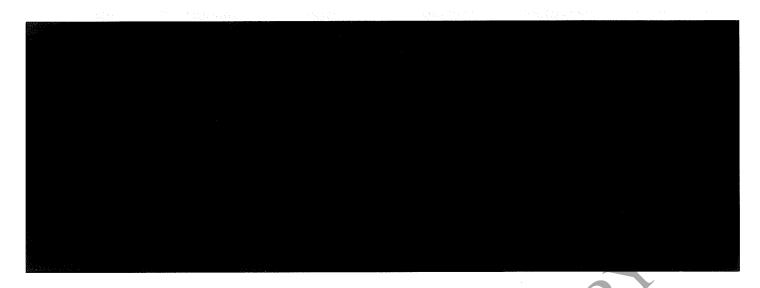


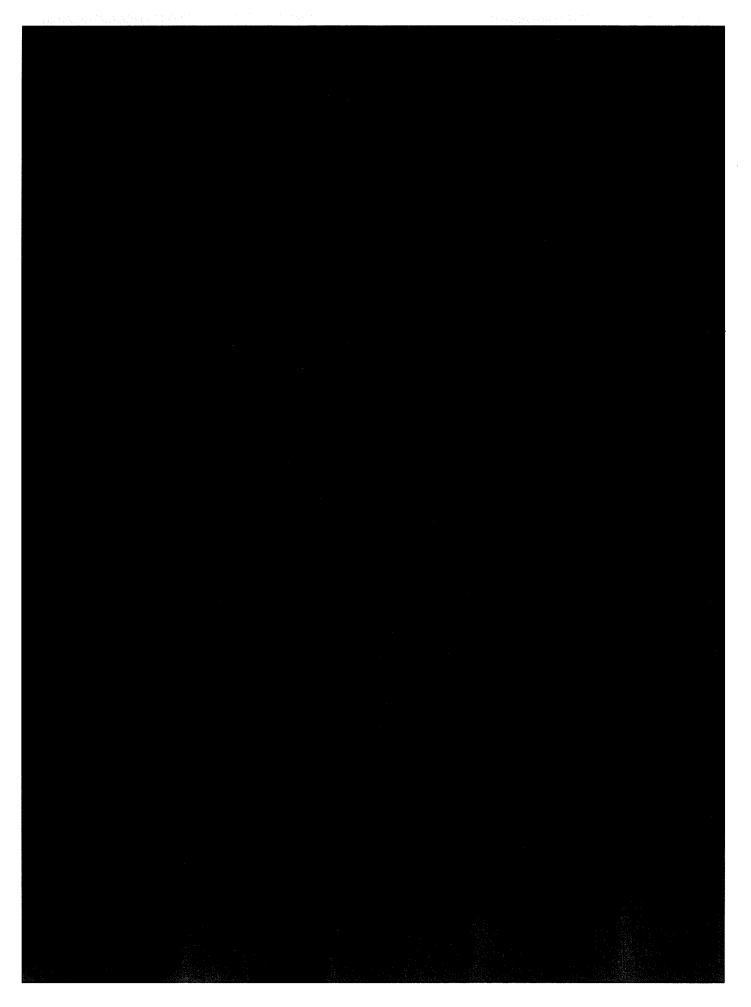


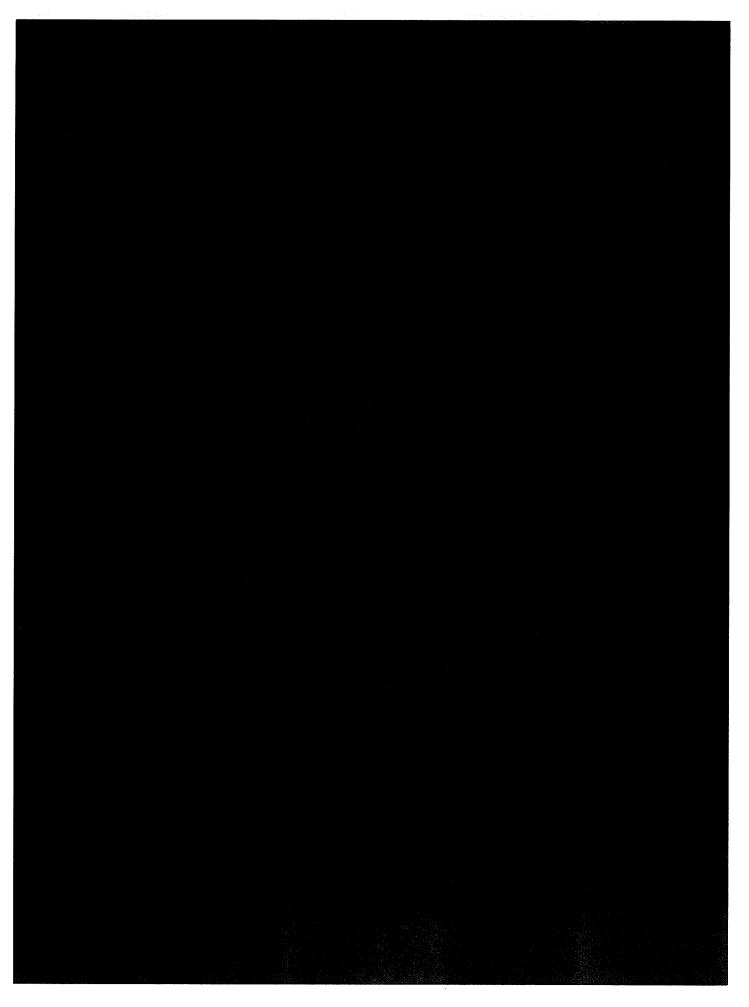


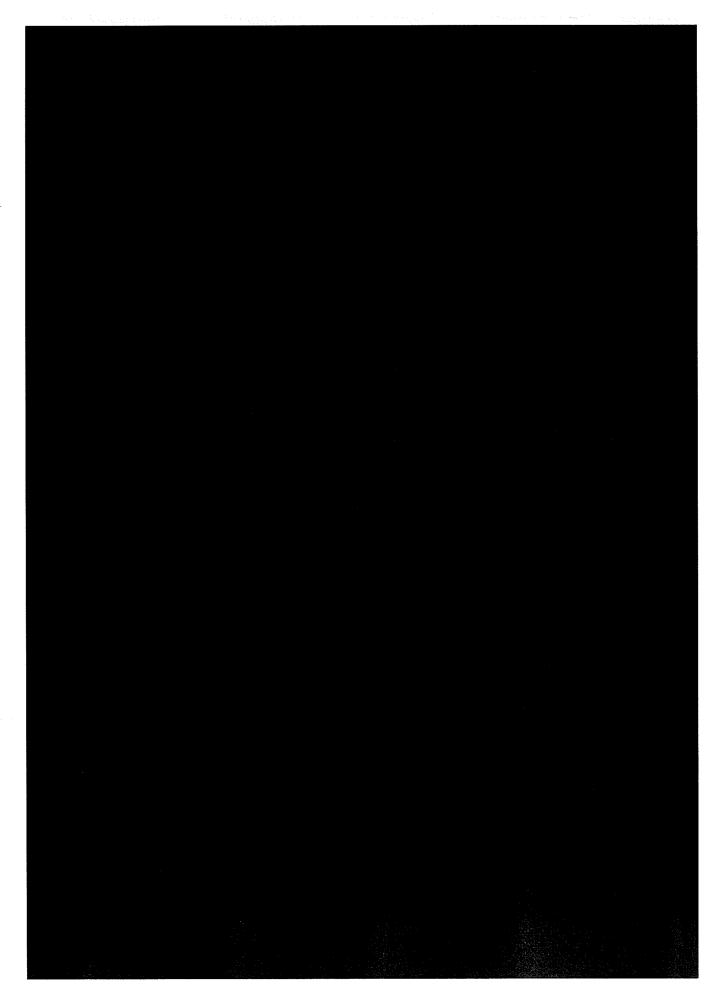


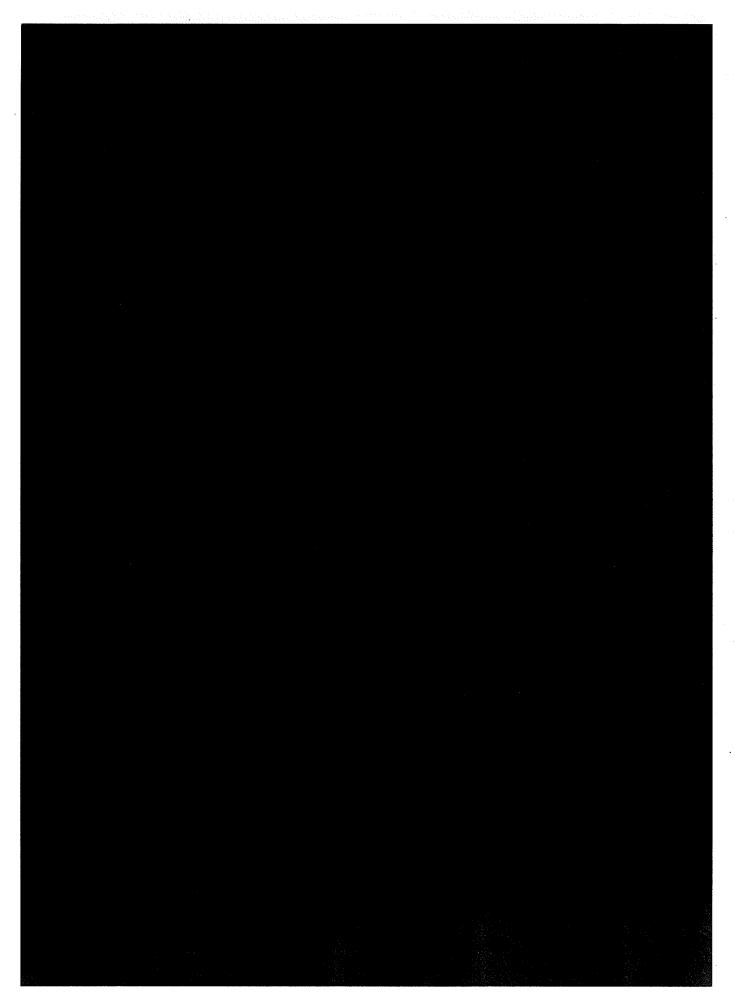




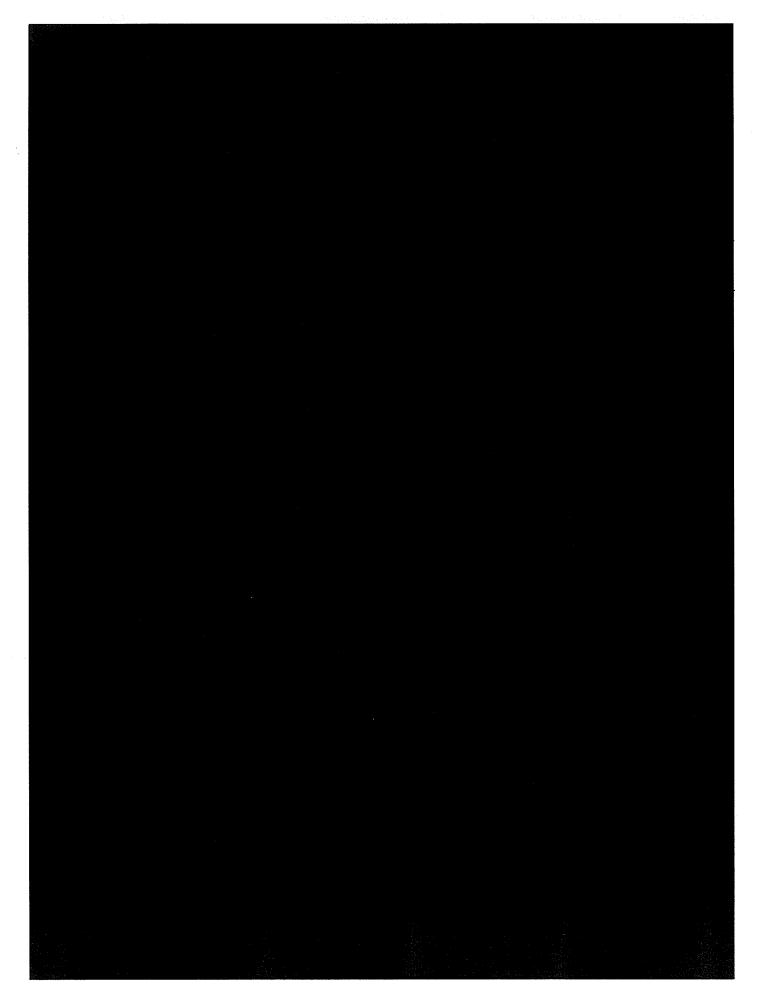


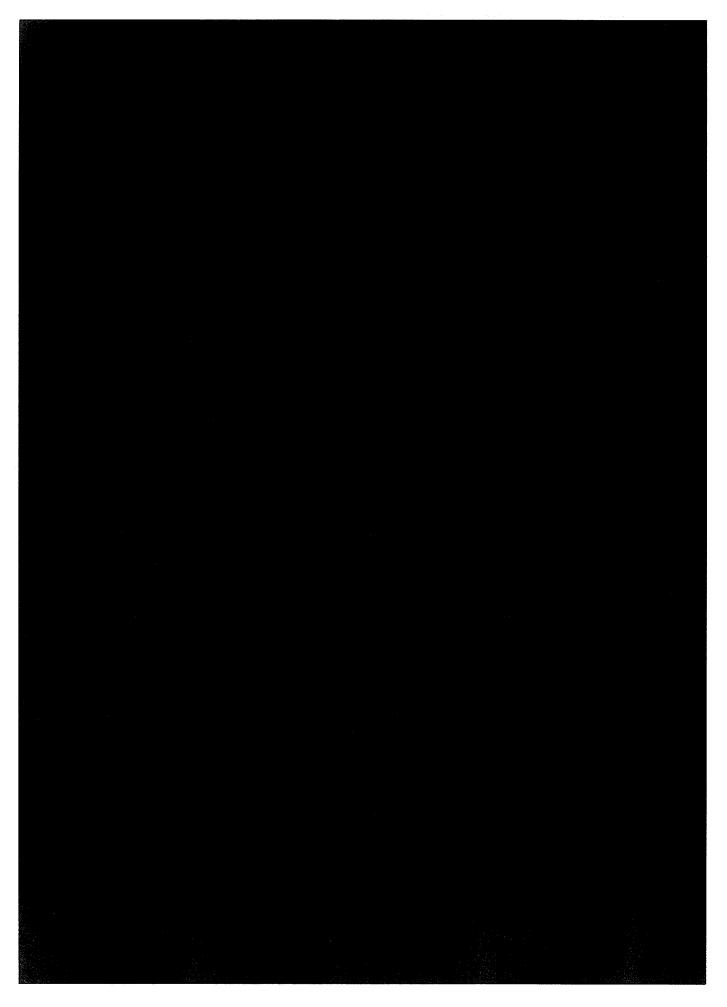


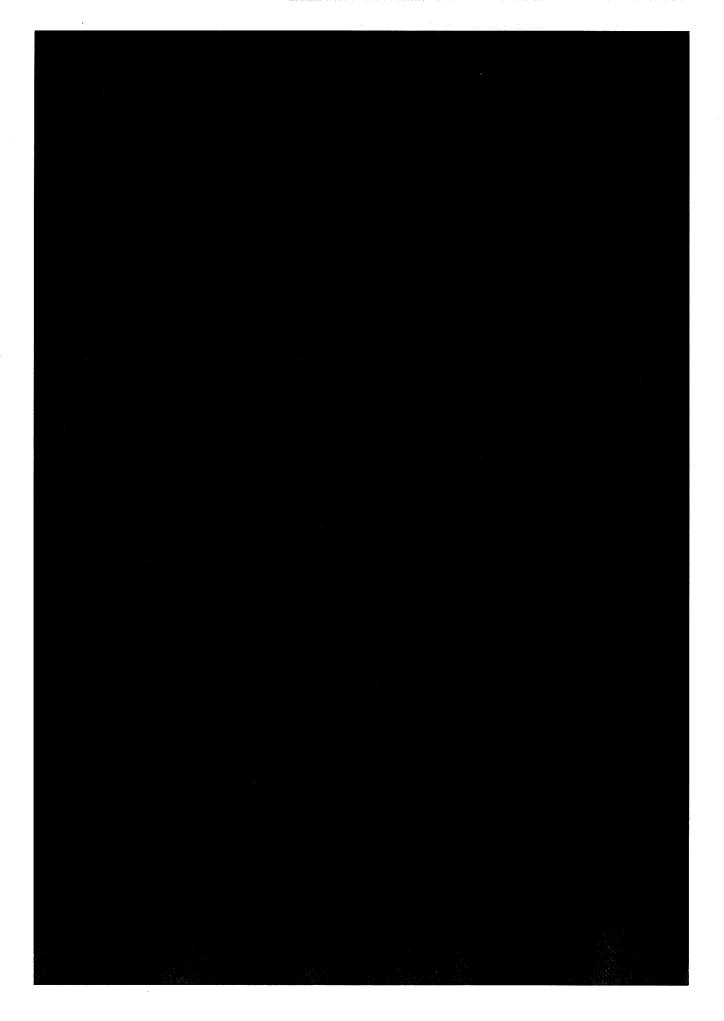


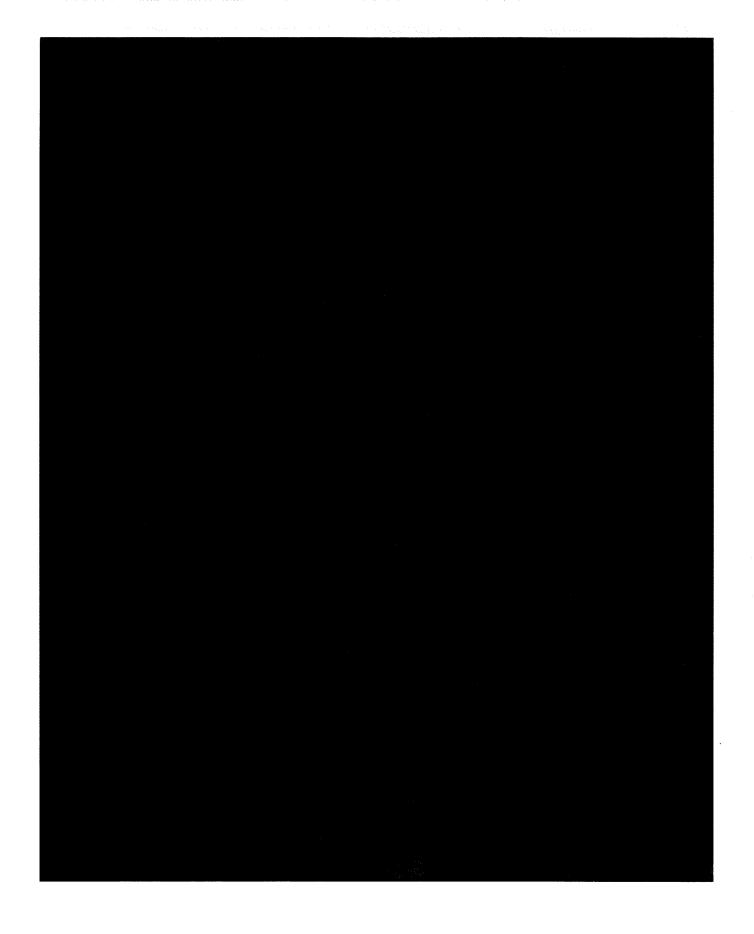


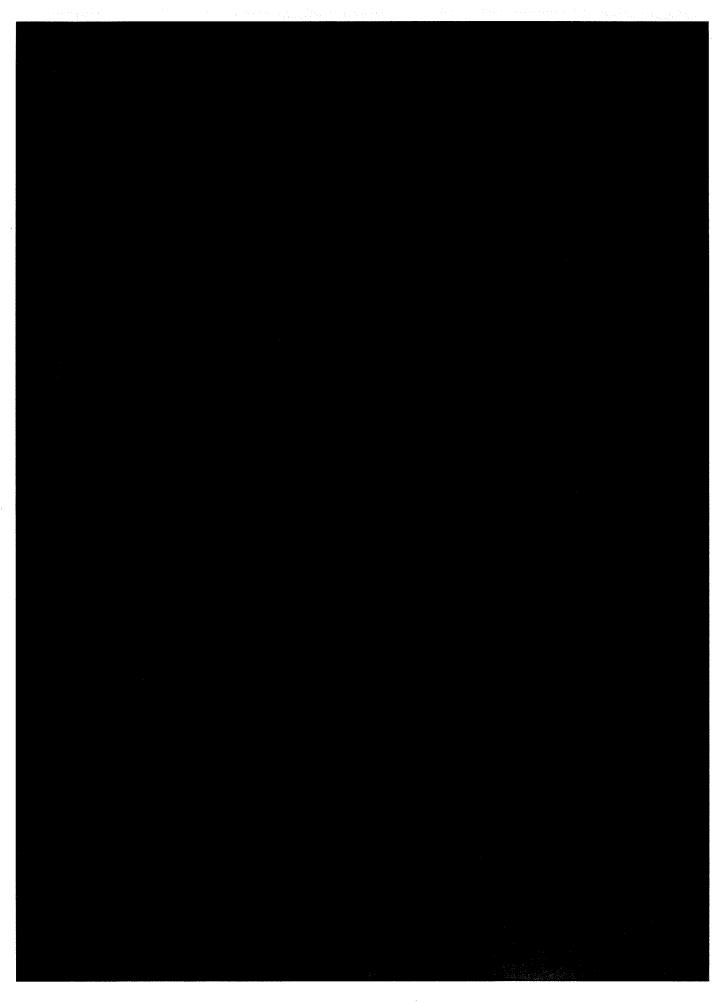


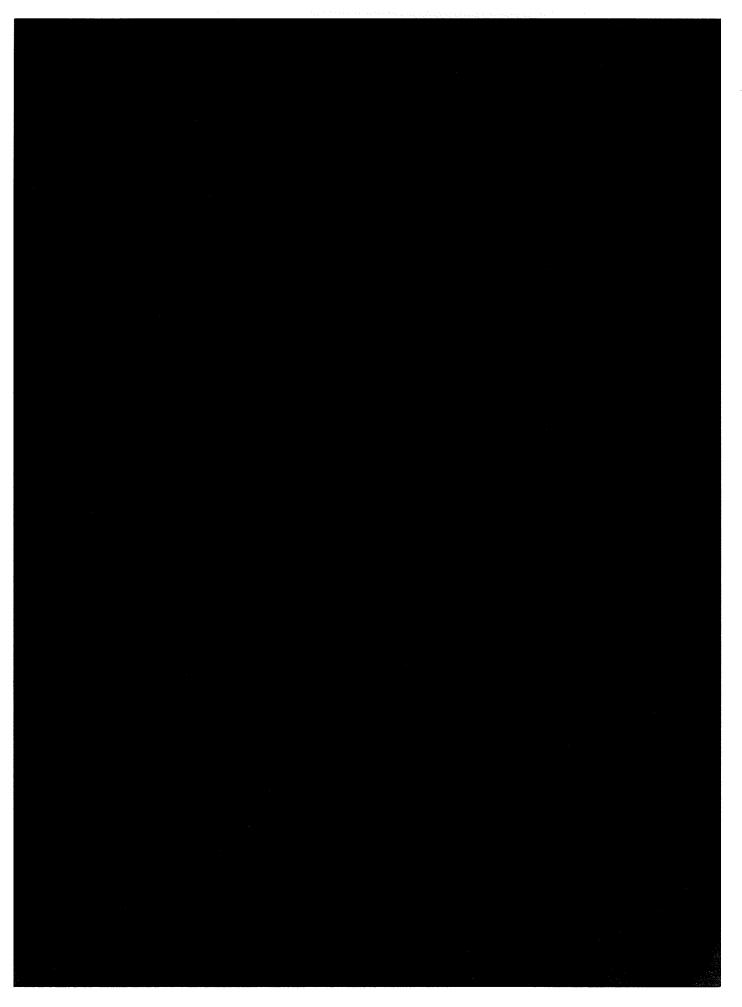


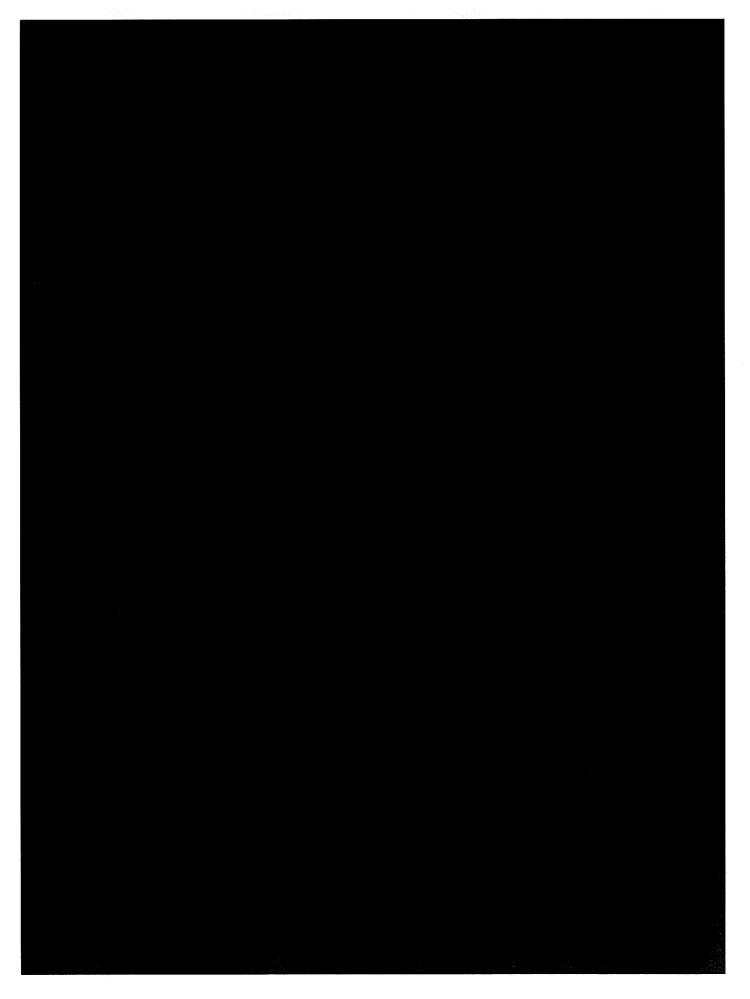


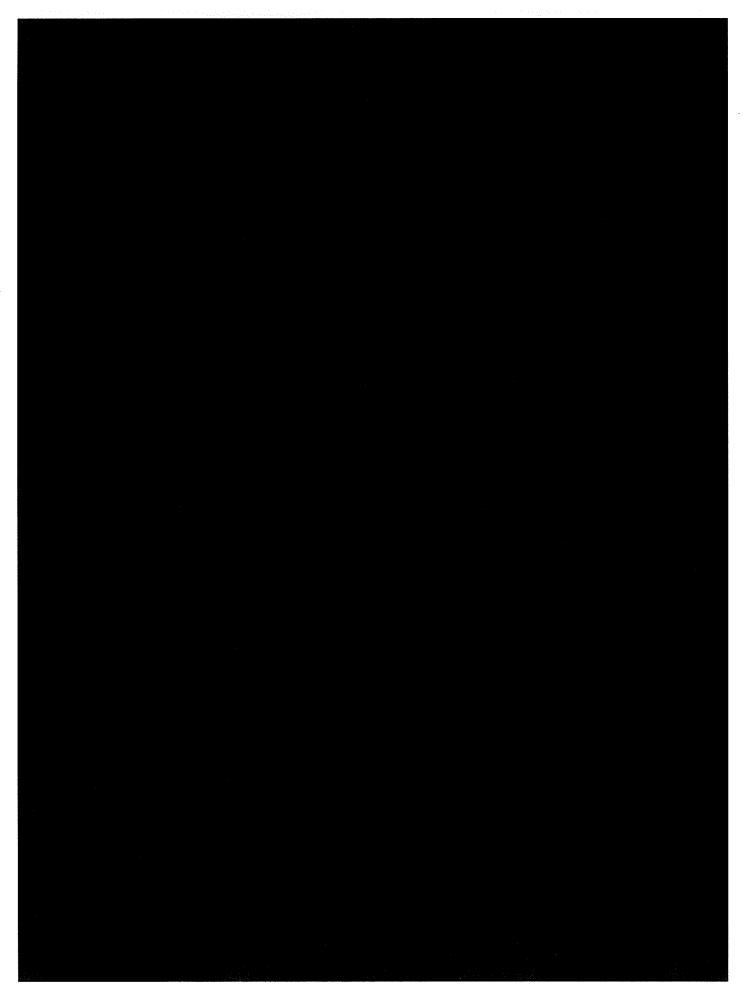


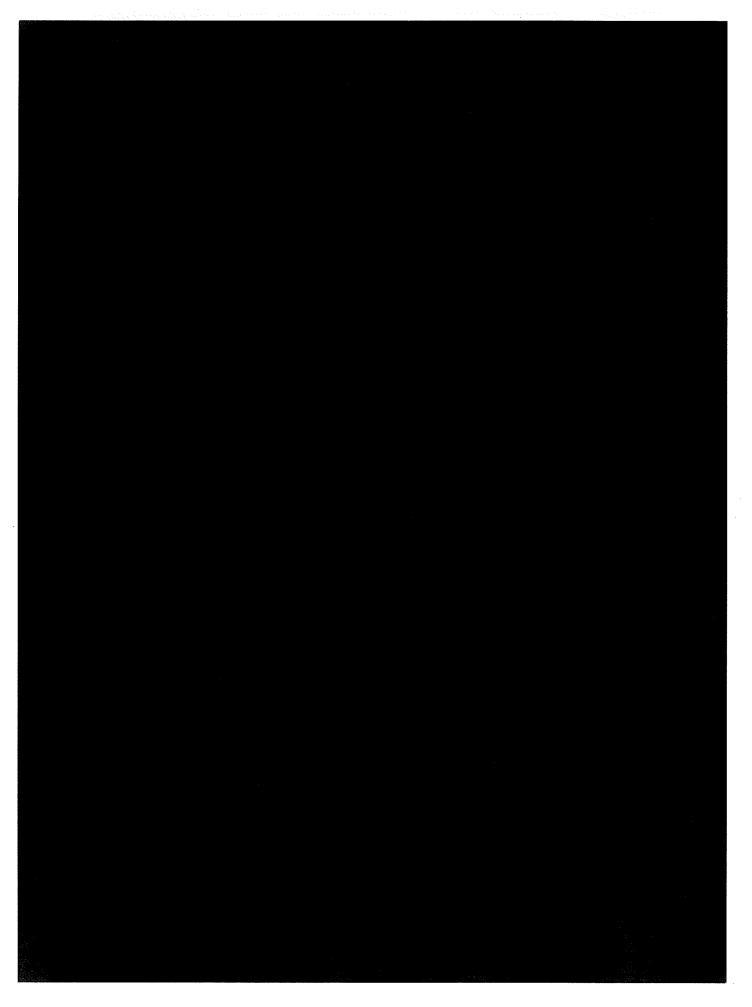


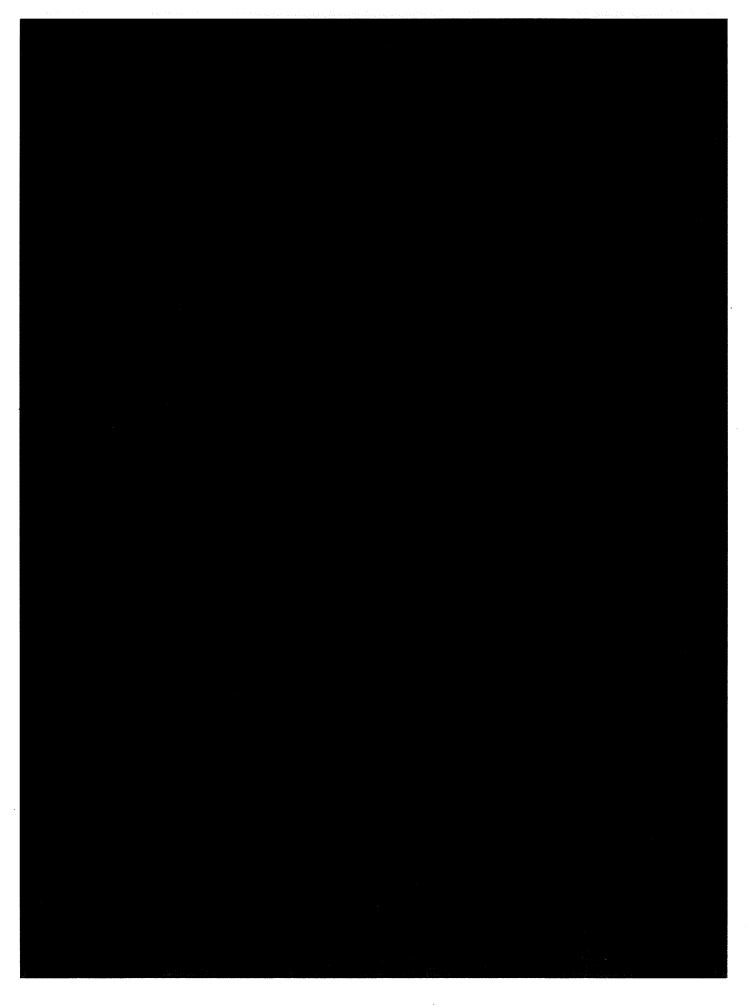


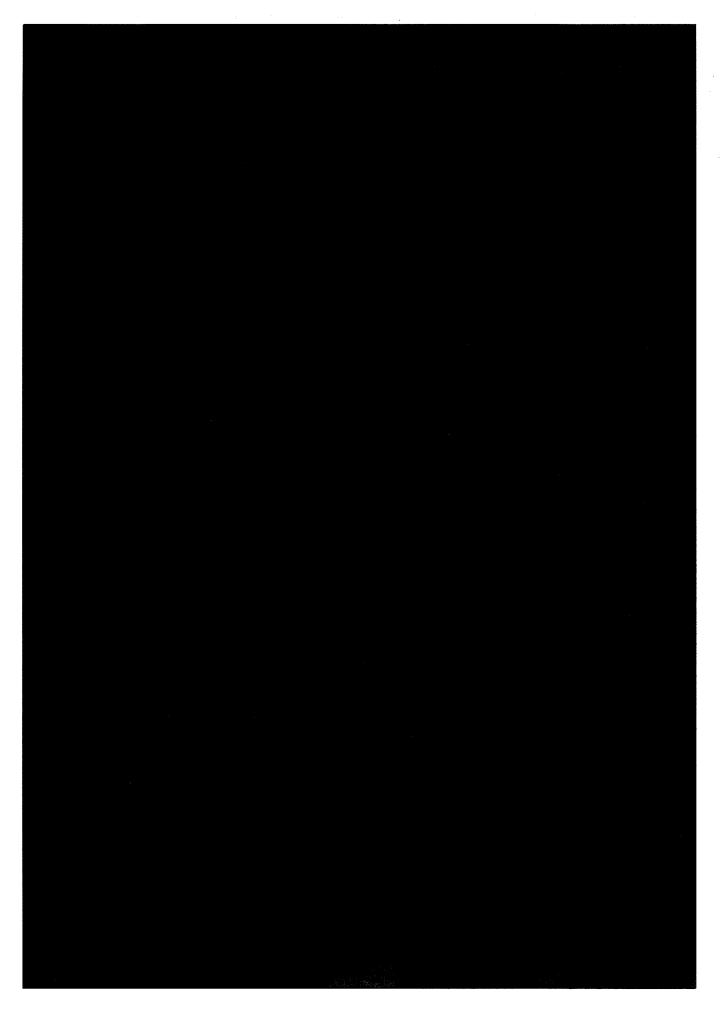


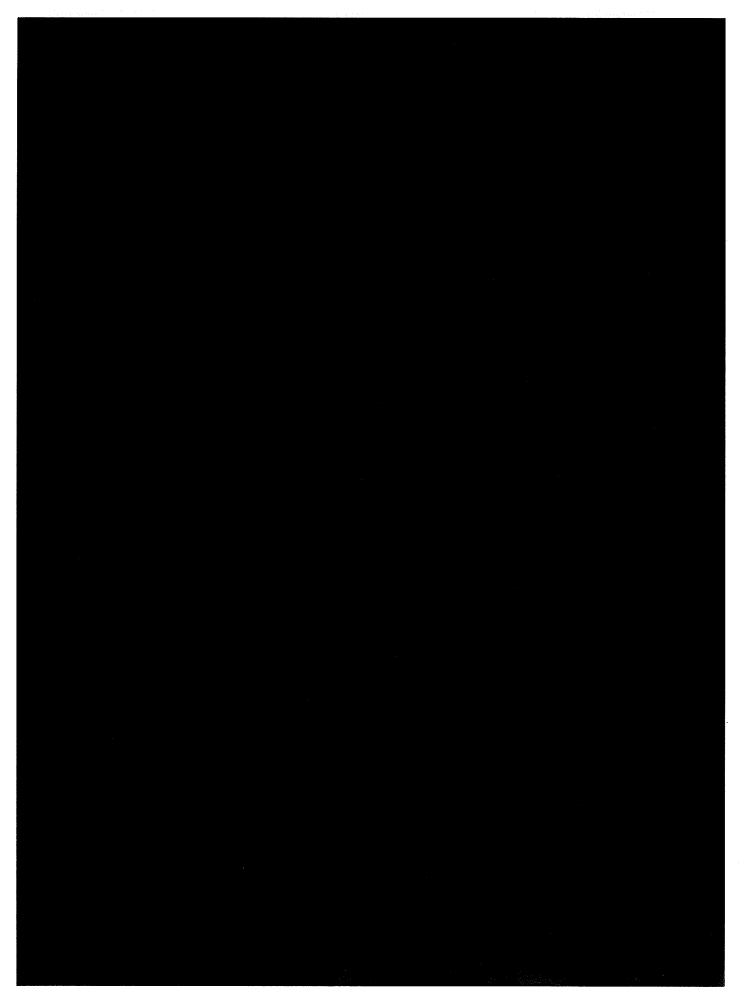


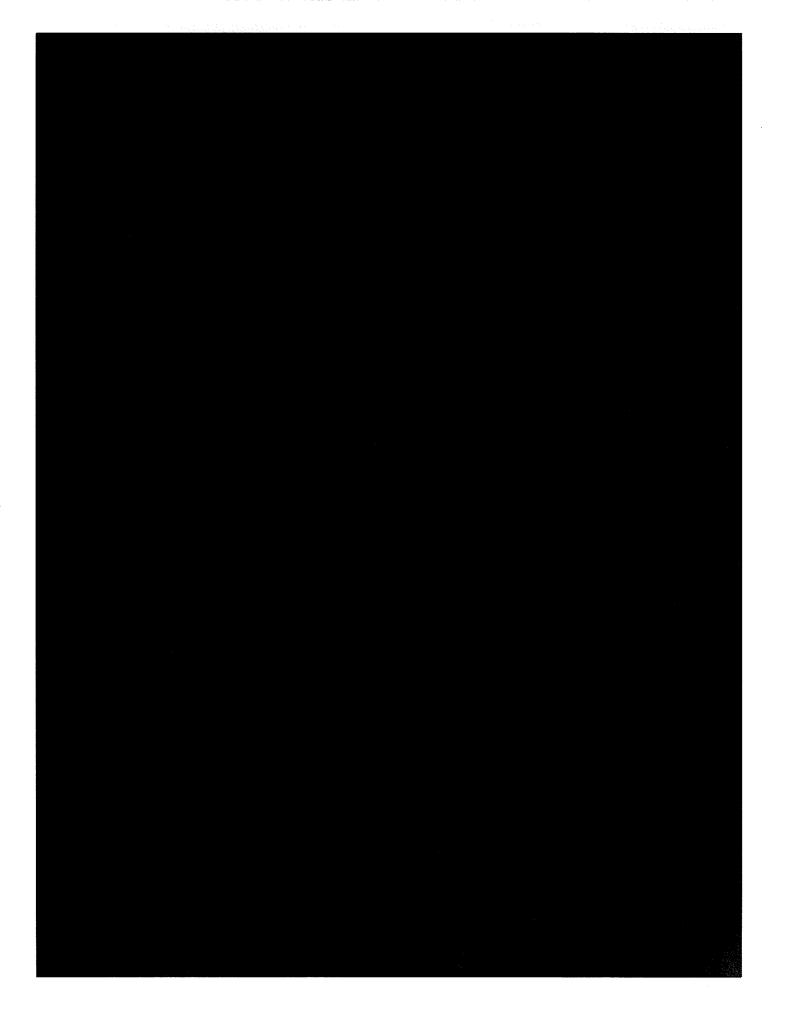












IN THE CIRCUIT COURT OF THE 15TH JUDICIAL CIRCUIT IN AND FOR PALM BEACH COUNTY, FLORIDA

KIM BANNER, as Personal Representative of the ESTATE OF JEREMY BANNER, deceased.

CASE NO.: 50-2019-CA-009962 (AB)

Plaintiff,

٧.

TESLA, INC. a/k/a TESLA FLORIDA,

Defendant.

AFFIDAVIT OF MARY (MISSY) CUMMINGS, PhD

Before me the undersigned authority this day personally appeared MARY (MISSY) CUMMINGS, PhD, who being first duly sworn under oath, deposes and says:

- That I am over the age of eighteen (18) years, competent to make this Affidavit, and with personal knowledge of the facts and opinions contained herein, and am competent to testify to the matters stated herein.
- 2. I am a systems engineer, obtaining my Bachelor of Science degree in mathematics at the U.S. Naval Academy, Masters of Science in space systems engineering at the Naval Postgraduate School and PhD in systems engineering at the University of Virginia. My doctoral thesis was Designing Decision Support Systems for Revolutionary Command and Control Domains. I am a former fighter pilot and assistant program manager of the Naval Aviation Depot for the United Stated Navy. I have been a Program Manager for the Office of Naval Research, Assistant Professor at Virginia Tech, Penn. State University, Associate Professor with tenure at MIT, and a professor in the Duke

EXHIBIT "K"

University Pratt School of Engineering, The Duke Institute of Brain Sciences, and the Director of the Humans and Autonomy Laboratory and Duke Robotics. Most recently, I was the senior safety advisor at the National Highway Traffic Safety Administration (NHSTA) at the invitation of the Biden Administration where I served in such capacity from November of 2021 through December of 2022. I am currently a professor at George Mason University in the Departments of Mechanical Engineering, Electrical and Computer Engineering, and Computer Science.

- 3. Based upon my education, training, and experience, I am intimately familiar with the areas and topics of unmanned and autonomous systems, human-unmanned vehicle interaction, human-autonomous system collaboration, human-systems engineering, autonomous design, system elements, driver monitoring systems, human supervisory control, human performance modeling, decision support system design and evaluation, testing and certification of artificial intelligence, and interpretable artificial intelligence.
- 4. Based upon my education, training, and experience, including my specific training and testing on autonomous systems, I am familiar with the applicable standards of care and testing required in the design, implementation and use of an autonomous system to be utilized in a civilian vehicle on public roadways.
- 5. I have personally reviewed the facts and evidence obtained throughout the discovery in this matter to include, but not limited to:
 - a. Documents, reports, data, videos and images related to the subject crash;
 - b. Internal documents, data, reports, and emails from engineers and employees of Defendant, Tesla;
 - Documents, reports and data related to prior crashes involving Tesla vehicles;

- Documents, reports and data related to subsequent crashes involving Tesla vehicles;
- Tesla advertisement materials and statements made by Tesla's CEO, Elon Musk regarding Tesla vehicles and the capability of its Autopilot system;
- f. Correspondence between Tesla and government regulatory agencies regarding
 Tesla vehicles;
- Deposition testimony of Tesla engineers, Tesla employees and retained experts related to the subject crash;
- Deposition testimony of Tesla engineers and employees related to the subsequent crashes involving Tesla vehicles;
- Discovery pleadings related to the subject crash, to include interrogatories and requests for production and response thereto; and
- j. Reviewed and considered the actions of Jeremy Banner, the actions of the truck driver, Richard Wood, and all other facts and circumstances surrounding the subject crash.
- In preparation for my first deposition, I outlined my initials opinions in a preliminary report. I have attached said preliminary report as Exhibit A to this Affidavit.
- After reviewing additional discovery, I outlined additional and supplemental opinions in an updated report. Thave attached said updated report as Exhibit B to this Affidavit.
- 8. It is my opinion, within a reasonable degree of engineering certainty, based upon my background, education, training, experience, testing, expertise and review of the aforementioned facts and evidence that Tesla is guilty of intentional misconduct and

gross negligence in causing the death of Jeremy Banner in the subject crash in the following respects:

- Allowing the Autopilot system to be used outside of Tesla's stated operational design domain (ODD), on roadways with cross-traffic;
- Allowing the Autopilot system to be used in excess of the posted speed limit on roadways with cross-traffic;
- c. Making public statements that its Autopilot technology is far more capable than it actually is;
- Relying on radar to detect crossing traffic despite established history of underride crashes and concerns raised internally within Tesla;
- e. Failing to re-train its computer vision dataset to include broadside trucks despite

 Tesla's knowledge of a previous death involving Tesla's autopilot and a broadside

 semi-truck.
- f. Failing to "label boost"/VIP status images of broadside trucks despite Tesla's knowledge of a previous death involving Tesla's autopilot and a broadside semitruck.
- g. Failing to re-train its computer vision dataset to include different lighting conditions;
- h. Allowing drivers of its vehicles, while autopilot is engaged, to take hands off steering wheel for 30 seconds or more despite Tesla claiming its autopilot system is a level 2 system which requires drivers to be ready to take immediate action;
 b. Failing to provide adequate warnings in the owner's manual that the autopilot system has problems detecting crossing traffic;

- Failing to follow recommendations of Continental's testing recommendations which warned Tesla of the limitations of detecting crossing traffic;
- k. Failing to conduct adequate testing of both its radar and computer vision systems;
- Failing to adequately train senior Tesla engineers and employees on basic information such as ODD and the need for consideration of human factors when designing and implanting its autopilot system;
- m. Failing to use cameras to detect inattention of the driver;
- n. Failing to utilize human factors expertise and/or human factors consultants in the design and creation of its warnings and user-interface;
- Failing to conduct testing to determine adequate perception/reaction times of the autopilot system;
- p. Failing to provide adequate supervision and quality assurance of subcontractors involved with the autopilot system;
- q. Denying that misuse of its autopilot system is a potential hazard;
- Failing to alert drivers while engaged in autopilot that the Tesla vehicle is no longer in Tesla's designated ODD;
- s. Failing to keep with known standards; and
- t. Failing to use reasonable care and practical engineering principals under all of the relevant circumstances.
- 9. It is further my opinion that Tesla had actual knowledge of the wrongfulness of its conduct and the high probability that injury or death to Jeremy Banner, and other Tesla drivers so similarly situated in addition to members of the general public on the roadway,

would result and, despite Tesla having such knowledge, intentionally pursued the aforementioned course of conduct, resulting in Jeremy Banner's death.

- 10. It is further my opinion that the conduct of Tesla, was so reckless and wanting in care that it constituted a conscious disregard or indifference to the life, safety or rights of Jeremy Banner and other Tesla drivers so similarly situated in addition to members of the general public on the roadway.
- 11. It is further my opinion that, within a reasonable degree of engineering certainty that the intentional misconduct and gross negligence of Tesla caused the death of Jeremy Banner.

FURTHER AFFIANT SAYETH	NAUGHT.	\sim
STATE OF		
COUNTY OF ALEXAND	ria SY	
BEFORE ME, the undersigned at	uthority, personally appeared,	, who is
upon being first duly sworn according affidavit and that the stakenowledge and belief.	rding to the law, deposes and says that she e atements made herein are true and correct to	executed the other the best of her
SWORN TO AND SUBSCRIBE	D before me this 17 day of May, 202	
STATE OF THE CONTRACT OF THE STATE OF THE ST	Muel Mussy) CUMMINGS	, PhD
	Notary Public (signature)	NO. AND
MEALTH		

Notary Public (Print)

In the Matter Of:

KIM BANNER vs TESLA

50-2019-CA009962

DR. MARY CUMMINGS

April 27, 2023

EXHIBIT "L"



800.211.DEPO (3376) EsquireSolutions.com

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IN THE CIRCUIT COURT OF THE 15TH JUDICIAL CIRCUIT
 1
 2
            IN AND FOR PALM BEACH COUNTY, FLORIDA
 3
     KIM BANNER, as Personal
     Representative of the ESTATE:
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     OF JEREMY BANNER, deceased, :
 5
                  Plaintiff,
 6
                                  :Case No.
              VS.
                                  :50-2019-CA00996
     TESLA, INC., a/k/a TESLA
 7
     FLORIDA, INC., FIRSTFLEET,
 8
     INC., OF TENNESSEE, a/k/a
     FIRSTFLEET, INC. and RICHARD:
 9
     KEITH WOOD,
                  Defendants.
10
                      Fairfax, Virginia
11
                   Thursday, April 27, 2023
12
13
     Virtual Video Conference/Videotaped Deposition of:
14
                      DR. MARY CUMMINGS
     called for oral examination by counsel for
15
     Defendants, pursuant to notice, in Fairfax,
16
     Virginia, before Sheri C. Stewart, RPR, RMR, of
17
     Esquire Deposition Solutions, a Notary Public in and
18
19
     for the Commonwealth of Virginia, beginning at 11:07
20
     a.m., when were present on behalf of the respective
21
    parties:
     Job No. J9551921
22
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1
     APPEARANCES:
     On behalf of Plaintiff:
 2
 3
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                                    Inc.
 9
     On behalf of Defendants Tesla,
                                           d/b/a Tesla
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16
17
18
     Also present: Chris Nelson, Videographer
19
20
21
22
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(Whereupon, Exhibit Nos. 1 and 2 were pre-marked for identification.)

THE VIDEOGRAPHER: Here begins Volume I in the video recorded deposition of Dr. Mary Cummings taken in the matter of Kim Banner v. Tesla, et al., taken in the Circuit Court of the 15th Judicial Circuit in and for Palm Beach County, Florida, Case number 50-2019-CA-009962. Today's date is April 27, 2023. The time on the monitor is 11:07. This deposition is being held at 4511 Patriot Circle, Fairfax, Virginia, 22030.

The court reporter is Sheri Stewart on behalf of Esquire, the video camera operator is Chris Nelson on behalf of Esquire. Appearances will be noted on the stenographic record. And could the court reporter please swear in the witness.

PROCEEDINGS

WHEREUPON,

DR. MARY CUMMINGS

called as a witness, and having been first duly



1	sworn, was examined and testified as follows:
2	EXAMINATION BY COUNSEL FOR DEFENDANTS TESLA, INC.,
3	d/b/a TESLA FLORIDA, INC.
4	BY MR. SMITH:
5	Q Dr. Cummings, my name is Joel Smith. We
6	met just before your deposition started, and we're
7	here in the Banner case where you have already giver
8	the deposition on November the 19th, 2020, right?
9	A That's correct.
LO	Q And since then you worked at NHTSA for
L1	some period of time?
L2	A I did.
L3.	Q And one of the things I wanted to
L4	understand is the restrictions that you understand
L5	yourself to be under with respect to discussions
16	about your work at NHTSA.
L7	A Well, when Elon Musk decided to tweet that
L8	he thought I was unbiased biased and unfair
L9	towards Tesla, and then there was a horde of his
20	followers on Twitter who decided to put a petition
21	up on the Internet that claimed an exceedingly

number of false things about me, which I had to hire



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a lawyer to get that petition taken down because it

was defamatory, and it was taken down. Because they

kicked up a fuss, and whined, then Tesla, the NHTSA,

the National Highway Traffic Safety Administration,

we had a meeting, and we all decided that it was

best that for the sake of appearances that I would

not be on any Tesla only investigations.

Q Um-hum. All right. So your work at NHTSA did not involve investigations where Tesla was the only product, and Tesla product was the only product involved?

A That is correct

Q Okay. You have given us a list of opinions. Do those -- does any of your work at NHTSA rely upon those -- does any of -- do any of those opinions rely on the work that you did at Tesla, at NHTSA?

A No.

Q Okay. And are you permitted to talk about the work that you did at NHTSA in litigation?

A Yes.

Q Are there any restrictions on what you can



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1 | and can't or can't say about the work you did there?

A I'm not allowed to talk about any information from any manufacturer that I saw that was confidential, but beyond that, there are no other restrictions.

Q Okay. You provided or I was provided with two documents that refer to or list your opinions.

And I'm going to hand you those. And since the court reporter's not here, I'm going to just mark these at the bottom right and we'll keep up with them.

So Exhibit 1 is a document that says
Mary Cummings, Mary L. Cummings, Ph.D., and has your
address in Durham, and it's your expert opinion
outlined for Banner versus Tesla?

A Um-hum. That is correct.

Q And has that been changed at all since your last deposition?

A No. No.

Q Okay. And then Exhibit 2 is a chart, 21 fair?

A That's correct.



Q All right. And that chart identifies 1 2 opinions by category, right? Yes, it reflects my updated opinions and 3 Α it's organized to help everyone keep track of them. 4 5 All right. So there's additional information on this, on Exhibit 2 that's not on 6 7 Exhibit 1? 8 Α Yes. And then there's this categorization of 9 intentional misconduct and gross negligence? 10 That's correct. 11 And when you were -- is this a 12 Okay. 13 document that, this Exhibit 2, a document that you 14 created? 15 Α It is. 16 Did you look for legal definitions of gross negligence or intentional misconduct? 17 I personally did not look up any legal 18 19 definitions, you know, in the course of helping 20 several legal teams, I do a lot of expert witness 21 testimony, not just for the Banner case.

me to organize when I'm doing a case like this.



1	Whether, and this framework, I came up with, what
2	technology failures were there, were there human
3	fail safes, because in this particular case the
4	human is the backup driver and then how you can
5	categorize those.
6	Q Okay. What's the vehicle model year that
7	we're working with here in the Banner case?
8	A The 2018 model S.
9	Q Okay. And this crash occurred March 1st
10	of 2019?
11	A That's correct.
12	Q Okay. In 2019, is it true that the major
13	cause of 94 percent of all failed crashes was human
14	error?
15	A No, that's not correct.
16	Q It's not?
17	A No, it isn't correct.
18	Q Are you familiar with a document called
19	The Economic and Societal Impact of Motor Vehicle
20	Crashes? I'm going to mark this Exhibit 3.
21	(Whereupon, Exhibit No. 3 was marked for
22	identification.)



1 Α Yes, I've seen it at some point in my 2 career. 3 BY MR. SMITH: This was just published in December. 4 0 Α Um-hum. 5 6 Right. And if you don't mind, is it true that driver-related factors were a principal cause 7 8 in 94 percent of crashes? So this is a big point of debate, it is 9 10 something that I personally had spoken with many senior officials at NHTSA, including people to judge 11 about, and whether or not you're interpreting that 12 13 correctly, that number originates, that 94 percent 14 had factors related to the driver but that doesn't 15 necessarily mean that 94 percent of accidents were 16 caused by drivers. Turn to page 128 of that document. 17 sorry, copied these, front and back. 18 19 It's okay. Good for the environment. Α 20 It is also good for me carrying this box. 21 Okay. So section nine is on distracted driving, you



see that?

- A Um-hum.

- Q And about midway down it says, you see where it says 9.0 percent, just identify that?
- A I'm sorry, how far down?
- Q About halfway down that first paragraph.
- A Yeah, about, was the cause in 5.7 percent
- of crashes and a probable cause in 9.0.

- Q Yeah, that's talking about internal distractions. This says, the next sentence says, the National Motor Vehicle Crash Causation Survey of 2008 sponsored by NHTSA found that driver-related factors were the principal cause of 94 percent of crashes.
- A Again, this is hotly debated even inside of NHTSA and there have been several articles recently written about this, about whether or not that is actually a correct statement, and NHTSA doesn't always state it right.
- Q Okay. I'm going to hand you another document that was previously marked as Exhibit 111 to the Payne deposition. There's an exhibit sticker on it, but I'm going to call that Exhibit 4 for this

1	deposition and the Economic and Societal Impact of
2	Motor Vehicle Crashes 2019 is going to be Exhibit 3.
3	We're going to come back to that in a minute.
4	(Whereupon, Exhibit No. 4 was marked for
5	identification.)
6	BY MR. SMITH:
7	Q There's Exhibit 4. Are you familiar with
8	automated driving systems 2.0?
9	A I am.
10	Q And if you turn to page i, little i?
11	A Oh, little i.
12	Q It's got a picture of the secretary of
13	transportation there?
14	A Um-hum.
15	Q And look at the third paragraph next to
16	the last sentence, it says, the major factor in
17	94 percent of all fatal crashes is human error.
18	A Um-hum.
19	Q So ADAS, ADS has the potential to
20	significantly reduce highway fatalities by
21	addressing the route cause of these tragic crashes.

That's a document that NHTSA put together with the

Department of Transportation?

A I would like to point out it's put together by a political appointee who was unqualified for the position and the major, that statement, the major factor in 94 percent of all fatal crashes is human error, that is flat out wrong and even the document that you just had me look at even said that there were factors related, you know, do I think that ADSs have the potential to produce highway fatalities, they have the potential, but it's unrealized potential.

Q But they are intended, automation systems are intended to significantly reduce highway fatalities by addressing this root cause, right?

A I'm sorry, are you asking me if the purpose of automated driving systems, the main purpose, is to reduce fatalities, that's what you're telling me?

Q No, I'm asking you if the, the purpose of ADAS and ADS systems is to reduce crashes?

A I can't speak to a company's purpose, it is my opinion that manufacturers put those systems



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in cars to make money, not for safety.

Q Okay. And, okay. But you disagree with the secretary of transportation?

A Elaine Chao, absolutely.

Q All right. And you disagree with NHTSA's statement in December of 2020 that 94 percent, that we just read, right?

I think it's, it's a nuance that's very It is flat out a hundred important to understand. percent incorrect to say 94 percent are caused by human error. It is true that 94 percent of crashes have some kind of factor related to the driver. you want to interpret that as, I think the failure of that interpretation is that people say then that means 94 performance accidents are caused by humans, 94 percent of accidents are caused by systemic failures. There are many causes to accidents, one of them, one of the layers in this Swiss cheese model of accidents will be a human. It always is in any transportation system where a human, but there are many other layers of causal factors that will apply.

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L	Q	were you	at NHTSA	in December	of 2020?
2	A	I was.			

Okay. And back on Exhibit 3 there, the Q larger exhibit. Isn't it true that 29 percent of crashes are attributable to distractions?

It is true that in NHTSA's dataset in the way that they analyzed it that 29 percent of accidents had some form of distraction as one of many causes.

Well, didn't they say that they estimated that 29 percent of crashes are attributable to distraction, isn't that what it says? Look at page 139.

- Α I'm not denying that.
- Q Just look at page 139.
- Yes. I mean --
- That's what they say?

So I, having been at NHTSA, how they, the CrIS dataset has significant problems, how they determine whether or not distraction was a factor is often based on a police report, which are often incorrect.



1 O Um-hum.

A There are many factors that go into how you would know someone's distracted. So, yes, using this log odds ratio, this is how they determined, they say, we thus estimate that 29 percent of crashes are attributable to distraction, they did not say caused by.

Q Well, let's look at, well, two things.

One is, this is not only based on police reports,
right?

A In the CrIS dataset they had, that's what they said, that these numbers come from CrIS dataset.

Q Is that what they say?

A Up in table, the table prior to that it says it comes from the CrIS dataset.

Q No, that is the CrIS dataset they have there, but is that what this is from or is there an odds ratio calculated using other things?

A I mean, if you would like me later after we're done to go through and verify the calculations, I'd be happy to. But presumably



And they're not saying attributable there, they're saying distraction, hyphen, caused. Look at the next paragraph there on 139

Α Okay.

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They're saying 29 percent, they're saying 6.1 is almost or is roughly one-fifth of the 29 percent, right, that's what they're saying, and they're referring to both as distraction-caused crashes. Right?

That is what they're saying.

So one in five distraction-caused Okav. crashes is a result of cell phone use?

Α Yes, I would also like to point out that they're also using SHRP2 dataset which I've used



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- extensively which is a naturalistic driving database.
 - 0 Right.
- Which is, it can be useful but the data at Α this point in time is almost 15 years old.
 - But not based only on crash reports?
- Well, they're using, they're saying, Ά used an SHRP2 sample for national driving age prevalence, so they're combining information from I would have to go and do a two different datasets. full-on analysis, which I am happy to later to demonstrate, you know, exactly what's going on here. But I think that their estimates, they are the estimates that they got using the methodology that they laid out here.
 - And you said what's 15 years old?
- Well, the SHRP2 dataset. Thev started collecting that data in 2010 and they finished it in November 2013, so it's 13 years old.
- Okay. And they didn't do a new naturalistic driving study to support this conclusion?



A That is correct.

I would further point out that other problems with this method of calculation is that it's a sweeping statement and distraction is different on different roads, and so for those numbers to truly be meaningful they would have to break them out by road type and time of day.

Q And do they need to break it out by what cell phone activity is being used?

A I -- as a researcher, the more you can break down your data and be more specific, the better. If you really wanted to have true verifiable numbers to talk about distraction, you need to do it by road type, time of day, if you want to make any comparisons which presumably due to any kind of accident that you're talking about.

Q Um-hum. Okay. So if, if NHTSA's right in their estimate of six, of 29 percent of crashes, we apply that to the, in 2019, if we apply that to the fatality numbers, which are 36,500 in 2019, there would, I'm sorry, those are not fatalities, I guess those are fatalities, not fatal crashes.

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So fatalities, that would be 10,546 fatalities due to, caused by distraction under NHTSA's analysis?

A So I'm not trying to be mean, Joel, but I mean, I'm a professor and I'm just saying like, I would, I wouldn't fail you for that answer but that's not a good answer.

Q All right. Well, why don't you just turn over to page 141 because that's exactly what NHTSA did.

A I know that's what they did. One of the reasons I went to NHTSA was to help them improve their mathematical approaches to the world.

Q So NHTSA gets an F on this one?

A I take -- they don't get an F but these are broad numbers. These are very, very big numbers and you can only talk about them in very high, high level overviews. There is not a direct correlation to their 29 percent distraction and the number of fatalities. First of all, multiple people can die in one crash. There are different, I keep saying this, road types and other conditions that you would

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need to filter this through.

So for these numbers to really be meaningful in this context, why you and I are here today, we would have to break that number down by divided highway and time of day to be more meaningful. And indeed, we would need to look at other things. The statistical model would be quite complicated because you also need to control for different kinds of cars. Teslas are incredibly crash worthy. A 1970s Pinto that might still be out there is not very crash worthy and so without controlling for the kind of car that you're in, the age of the car, whether the car had airbags, for example, all of these things are going to matter in terms of predictions of fatalities. So I appreciate you're trying to make some broad brushes, but the brushes are just too broad for this context.

Q Yeah. I'm not really trying to make broad brushes. I was just reading a report that was done by the agency that you work for that identifies a driver distraction and particularly driver distraction cell phone use as a serious safety



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1 problem and quantifies that.

A I totally, I hear you, and one of my jobs at NHTSA was to help improve their methodology.

Q So you agree that this is a serious problem on the road?

A Do I, do I think the distraction is a serious problem on the road? Yes.

Q Do you believe that cell phone use is a serious problem on the road?

A I believe we need to do something about cell phone use.

Q It's against the law in most places?

A That's correct.

Q And NHTSA has its own, multiple own campaigns to try to keep people from using their cell phones on the road?

A That's correct.

There are some safety benefits to ADAS systems even though they can't address every situation on the road, true?

A That is a, I wouldn't say that is a true statement. I would first need you to define what



1 you mean by ADAS.

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Q Okay. Okay. So, for example, you believe that lane-keeping technology is an important safety feature?

A It is.

Q And you believe that there's a safety benefit to lane-keeping technology and that it keeps people in their lanes?

A It can.

Q And it does have a safety benefit, correct?

A I believe that lane keeping does have a safety benefit.

Q One of the problems with lane keeping is that drivers disable it a lot, don't they?

A There's no data to, to suggest people are disabling it.

Q Isn't there --

A I've never seen any study that said definitively how many people are disabling lane keeping.

Q Didn't IIHS do a study in 2017 that



demonstrated 51 percent of drivers out of a

983-vehicle observation had their lane maintenance
systems turned off?

A Yes, and that in a six-year-old study, in
that small group of people, you know, do people like
lane-keeping technologies, you know, in that study
they didn't, but it was just slightly over half.

Q And lane-keeping technology is even in new cars today are, sometimes people don't like them because they sort of nudge you back into your lane and move you back and forth and that's one of the reasons they said people would turn them off?

A I have seen people's subjective responses reflect that they do not like that effect.

Q And the difference in that technology and lane-centering technology is you don't get that wobble and bouncing back and forth from line to line, right?

A In theory.

Q That is one of the intentions of lane-keeping technology, to have a smooth ride in the center of lane?



1 Α Yes. 2 Okay. Is there safety benefit to 3 lane-centering technology? Yes. It's in the same vein of lane Α 4 keeping. 5 Okay. Do you have a car with 6 lane-centering technology? 7 8 Α No. You also think that advanced cruise 9 control has safety benefits? 10 ACC is a little bit more complicated. 11 Α 12 0 Um-hum. I think it can have safety benefits. 13 I said advanced cruise control, I should 14 0 have said adaptive cruise control. 15 16 It's funny, I heard what you meant. Yes, I think that it could have safety benefits. 17 18 think the jury is still out on whether it's 19 unequivocal that it has safety benefits. 20 But in your last deposition you told us 21 that it helps with fatique?

It does help with fatigue.



Q And does your car have traffic aware 1 2 cruise control or adaptive cruise control? MR. EVERSOLE: I'm going to object to the 3 Just because I think what Dr. Cummings 4 5 has in her car is really not relevant to the 6 case in chief. But go ahead. and I don't 7 MR. SMITH: think that's a form objection. 8 I'm not sure who's 9 THE COURT REPORTER: 10 speaking with the objection. 11 MR. EVERSOLE: John Eversole. That is not a form objection, 12 MR. SMITH: 13 that's a relevance objection, which is not to 14 be made on, on the record, but we'll take that 15 up at a break. 16 BY MR. SMITH: 17 But having a car with those benefits, the ones we've talked about, is a positive safety 18 benefit, not just for the driver? 19 20 So in what we just covered --21 Yeah. 0 22 -- I will agree that lane keeping and lane



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centering have clear safety benefits, adaptive cruise control is -- it's still not clear whether that's an overall safety benefit.

Q Okay. I hand you, this is your deposition from November 19, 2020 and if you don't mind, turn to page 92.

A Okay.

I'm not going to read every word on 92, we're talking about the lane keeping and lane centering and then as we go over, in line 22 on page 92, the question was, so for cruise control, then, is there a safety benefit or isn't there? And you said, I just said there was a safety benefit for fatigue. And then the question was, so how do those safety benefits show themselves in the real world? And then you talk about people drift out of their lanes, lane keeping helps them in the lane and automated cruise control allows people, you know, to maybe physically relax a little bit, it helps with fatigue. So then you said in November of 2020, there was a safety benefit for cruise control, right, at the bottom of page 92?



MR. EVERSOLE: Object, asked and answered.

MR. SMITH: I really didn't ask and answer

-- I asked her if that's what she said in 92.

I had not asked that question.

A I said there is a very clear safety
benefit if you're defining a safety improvement in
this narrow scope as reducing driver fatigue, but if
we're talking about overall safety, that would mean,
as you just mentioned, safety to the driving public.
So the jury is still out on whether ACC and those
kinds of, whatever, other people want to call them
and their manufacturers, whether or not there's a
global benefit. I would say there's a local benefit
to the driver, but globally the safety has not been,
the safety aspect has not been definitively
answered.

BY MR. SMITH:

Q But those two things, lane keeping, lane centering and the adaptive cruise control, you said on page 93 at line 14, question was, do those benefits outweigh any risk that they may involve?

And the answer was, those specific features just



described, which are the two we're talking about, are the features that I personally think provide the best safety benefits, yes, correct?

A Correct. Although, you know, I'm three years older, sadly, than I was when I did this deposition and I've been able to think a lot more about these issues, especially given my time at NHTSA and now I can more accurately describe that lane keeping has global safety benefits, not just local safety benefits, and ACC has local safety benefits, but it's not clear if it has global safety benefits.

Q But those benefits of those two systems outweigh the risk for those two features, right?

A I think for lane keeping and lane centering, that it's clear the benefits do outweigh the risk. For ACC, it is still unclear.

Q All right. And that's again a change from what you said in 2000 --

A It's not a change, it's a refinement of my language.

Q All right. Well, let's see how much you



1 had to refine it, because the question on page, on 2 line 19 of page 93 was, and the benefits outweigh the risk and your answer was for those features, 3 that's what you said then, right? 4 5 Again, I have had since I've been able to look at --6 7 My question was, question was that's what you said then. Then you can explain. I didn't exactly, I didn't exactly use the 9 Α same language then that I'm using now. 10 The language you used then was what I just 11 12 read, I read that correctly! You read it correctly, but we did not have 13 Α this discussion three years ago about global and 14 15 local risk. 16 Now, I don't mean to keep you from answering questions, but when I'm asking a question 17 about something specific like what does that say, I 18 19 might want you to answer that question and then 20 answer so we're not confused with the record.

MR. EVERSOLE: It is confusing. Let's



Thanks.

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take a break. Let's take a break. I want to 1 talk to you about something about this whole 2. deposition, all right? Off the record. Let's 3 take a five-minute break. 4 THE VIDEOGRAPHER: All right. Going off 5 the record. The time is 11:42. 6 7 (Whereupon, there was a break from 11:4 a.m. until 11:45 a.m.) 8 9 THE VIDEOGRAPHER: We're now on the record. The time is 11:45 a.m. 10 Here's the objection on MR. LYTAL, III: 11 12 the record. THE VIDEOGRAPHER: Sorry, we're not on the 13 14 record yet. MR. LYTAL, III: You can say whatever you 15 16 We're on the record. This is Lake Lytal on behalf of the plaintiff. 17 18 THE VIDEOGRAPHER: We are now on the record. The time is 11:45. 19 20 MR. LYTAL, III: Okay. For the benefit of 21 the record, since we're back, this is Lake

Lytal on behalf of the plaintiff, we kind of

have been lecting this drag on 45 minutes now.
The objection for the judge's benefit and for
everybody's benefit under Florida law, the
reason and purpose of this deposition is an
update deposition. An update deposition under
Florida law is to get any new opinions the
witness has and update any testimony she has in
regards to new opinions. Under Florida law,
you are not allowed during an updated
deposition to cross-examine the witness on a
prior deposition. The purpose of the
deposition is not to take another deposition
starting from scratch. The stuff you've been
covering, as you admit, because you're asking
her about her old opinions was already covered.
So my objection is at this point

obviously we're here to do an updated deposition, not start all over again and rehash anything. So our objection is simply that, we have no problem with you asking Dr. Cummings about any of her new opinions, explaining her new opinions, what they are, but anything going



back and covering the past we are going to 1 object to it. I'm sure you're going to 2. continue to do it. If you do, at some point 3 we'll stop the deposition. But feel free to 4 5 move forward and conduct and an updated deposition, that's the objection. 6 7 MR. SMITH: Okay. I'm not sure you wer listening just a few minutes ago. 8 9 MR. LYTAL, III: I'm pretty sure I was, 10 so. 11 MR. SMITH: You know 12 MR. LYTAL, III: Proceed, proceed with 13 your questions. MR. SMITH: 14 Ĭ' going to respond to you and 15 if you want to keep interrupting me while I'm trying to tell you our position, it will take a 16 while, but I very politely let you finish. 17 if you were listening a few minutes ago, you 18 will know that in my questioning of the 19 20 witness, she identified changes from the language that she used in the prior deposition. 21

That's certainly fair game for an updated



deposition. And she herself commented that it's been three years and she's done more work.

So I'm asking questions of a witness who has three years more experience, including experience at NHTSA, and I'm finding out that things she said in her deposition are now different. That's totally appropriate for an updated deposition and I suppose if you want me to rely entirely on what she said before about anything she said before, that probably would disadvantage you more than me.

MR. LYTAL, III: I don't think it was, I don't think it would, I was listening. I don't think anybody here would like you to go through the prior deposition which took an entire day and ask her if any of the answers to her questions have changed, let's have a three-day deposition, usually updated depositions take a few hours, I can see where this one's going, I get it.

MR. SMITH: No, you can't. Because I don't have more than a few hours.



1	MR. LYTAL, III: You all bill hourly, we
2	don't. Please proceed with the updated
3	deposition, that's all I'm asking.
4	MR. SMITH: All right. Well, listen, I'm
5	ready to get home, so, and I don't take a long
6	deposition.
7	MR. LYTAL, III: Okay. We all are
8	MR. SMITH: I don't, I don't take a long
9	deposition so this will not take all day, I
10	assure you.
11	MR. LYTAL, III: Please proceed.
12	BY MR. SMITH:
12 13	BY MR. SMITH: Q Let's turn to this new document, Exhibit
	Q_ Y
13	Q Let's turn to this new document, Exhibit
13 14	Q Let's turn to this new document, Exhibit 2. Okay?
13 14 15	Q Let's turn to this new document, Exhibit 2. Okay? A Um-hum.
13 14 15 16	Q Let's turn to this new document, Exhibit 2. Okay? A Um-hum. Q One of the opinions you state is in the
13 14 15 16 17	Q Let's turn to this new document, Exhibit 2. Okay? A Um-hum. Q One of the opinions you state is in the first column, first bullet point, intentional
13 14 15 16 17	Q Let's turn to this new document, Exhibit 2. Okay? A Um-hum. Q One of the opinions you state is in the first column, first bullet point, intentional misconduct under the technology side says public
13 14 15 16 17 18	Q Let's turn to this new document, Exhibit 2. Okay? A Um-hum. Q One of the opinions you state is in the first column, first bullet point, intentional misconduct under the technology side says public statement, technology is far more capable than it



could not drive itself, right?

MR. EVERSOLE: Object to the form.

A I can't speak to what he knew or he didn't know.

BY MR. SMITH:

Q Well, of course you read the depositions of Ms. Kim Banner and Ms. Rachel Banner that were taken both after your deposition in this case, right?

A I read them.

Q Okay. And if we look at Kim Banner's deposition at page 132, 12, I'm going to read it, and then I'm going to hand it to you because I only have one copy, it says question, the question was, he knew the car couldn't drive itself, he always focused aware and alert. He knew he had to drive the car. It just didn't drive by itself. That's what you're saying. And the answer was, correct, I want to just show you that. Is that what -- you can, you can feel free to read it.

A I agree that's what she said.

Q Okay. And you don't have any reason to



dispute Ms. Banner is one of the people who knew him best of all, right?

MR. EVERSOLE: Form, objection.

A I can, as a person who's been studying human interaction with technology for over 20 years, I cannot say for sure what anyone was thinking.

BY MR. SMITH:

Q Okay. So let's look at the deposition of Rachel Banner on page 60. Do you know who she was, his daughter?

A Yes.

Q Okay. And the question starting on page three is, did your dad ever tell you that the car could drive by itself? And the answer is, no, I mean, and question, okay. And then she says, I mean, we probably talked about it but I already knew. And then the question was, you already knew it could drive, it could drive by yourself? Yeah, but when we were talking about it, he always like, but you can only take your hands off for, you know, this many seconds. So, I mean, like there's, I don't remember the exact conversation but he knew of

1 | the limitations of it.

MR. EVERSOLE: Object to form.

BY MR. SMITH:

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Q This is the daughter saying he knew of limitations.

A Yes, I have a teen daughter myself and I would never, ever think that she could ever adequately express what my thoughts and knowledge.

Q All right. And then on line 16 she says, it wasn't like we were not both under the impression that it could drive continuously by itself because that's dangerous and not possible.

A Again, I cannot, this is like hearsay of hearsay, and I would point out, though, that she did say that he did, he told her that he could take his hands off the steering wheel for some period of time. So in that case, if that were true, then if he really didn't think it could drive itself, then he wouldn't take his hands off the steering wheel.

MR. EVERSOLE: Object to the form of that question. I don't want to interrupt you.

BY MR. SMITH:



So still on the issue of statements that 1 0 the technology is far more capable than it actually 2 is, the first time the car is turned on you get a 3 4 message on the screen about autopilot, right? 5 Α Agree. Q And I'm handing you what I'll mark as 6 7 exhibit -- hold on. I have -- the last one you marked for me 8 was three. Oh, I'm sorry, four. And then did --9 was this marked a different one? 10 We'll call this one five. 11 0 (Whereupon, Exhibit No. 5 was marked for 12 identification.) 13 MR. EVERSOLE: You didn't mark her 14 15 deposition as an exhibit? 16 MR. SMITH: No. Neither of the 17 depositions were marked. SMITH: 18 It says, auto steer is a driver assistance 19 20 feature and does not make your vehicle autonomous. 21 That's not an overstatement of the capability, is



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it?

1	A I'm sorry, and you said this appeared
2	where?
3	Q This is the message that comes up for the
4	agreement by the driver to enable, right?
5	A No one ever reads this. You never read
6	the EULA, the end-user license agreements, people
7	just accept, accept.
8	Q Okay. I'm asking you about your opinion
9	that there were statements that the technology is
10	far more capable than it actually is. This
11	statement is, that I just read, this driver
12	assistant feature and does not make your vehicle
13	autonomous, that's not a statement?
14	A I wouldn't have put this in the public
15	statement category. I would not put this statement
16	in that first block.
17	Q So the people that this reaches are, if it
18	reaches people, are the drivers, right?
19.	A If they read it.
20	Q Okay. If they read. I'm not asking you
21	whether they read it or not. I'm asking
22	A If they don't, but, okay.



Q I'm asking you, let me ask you that. How do you have some data that shows that this message is not read?

A I don't know if there have been any studies, although John Lee just put out a new full self-driving study that, I don't know if he asked that question. But just in general for end-user license agreements we know that, and there has been plenty of research on this, people just accept, accept, accept, accept.

Q Do other manufacturers require this agreement or just Tesla?

A Other manufacturers give very similar statements in owner's manuals.

Q Right, right.

A So, yes.

Q What I'm asking you about is a little different, okay? Because this is not the owner's manual. This comes up on the screen when you start the vehicle, right?

A Yes. I can't say definitively for other manufacturers whether or not they put a two, four,



six, eight, ten, 11-line text, which I'm guessing is around a couple of hundred words, I am not aware of any other manufacturer that puts this much will text up on a screen prior to starting the car.

Q And under the text, whatever it says, and whether people drive it or not, there's a decision that the driver has to make, whether to enable the autopilot or not enable the autopilot, right?

A Yes, they accept it, that's correct.

Q Okay. Now, what I'm getting at is whether or not anything in here, over -- what did you say, is a statement that the technology is far more capable than it actually is.

A I wouldn't, as I said before, I don't consider this document here to fit inside this block because this is not a public statement, when I say a public statement, I mean Elon Musk going on "60 Minutes" and showing everybody how you can drive hands-free. That is a public statement.

Q But the driver of this vehicle, the information on the vehicle itself says the driver assistance feature doesn't make your vehicle



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autonomous, that's accurate?

A That is what Tesla is telling their customers when they turn on the car, yes.

Q And that's not an overstatement of the technology capability?

A You know, is it an overstatement? I'm not sure what you mean by overstatement.

Q Well, I'm sorry. Is it a statement that the technology is far more capable than it actually is? Those are your words.

A No, I said in that block I said public statement.

Q I know. But I'm asking you if this statement, see, because I think that if the people that are affected are the drivers and this is something that's being said to the driver, that it's relevant to this issue about what is being said to the driver as to whether or not there's a statement that the technology is far more capable than it actually is. So what I'm asking you is just simply, whether or not that first sentence is a statement that the technology is far more capable than it

actually is?

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A I believe that this is a statement that Tesla's making to the driver when they sit down and start the car, a very long statement, and a very wordy statement that is not being truly understood.

Q Okay. But that really wasn't even my question. My question to you, and the one you don't want to answer is --

MR. EVERSOLE: Object to the form.

MR. SMITH: I'm sorry, I won't say that.

She just hasn't answered it three times, so I figured she didn't want to answer it.

MR. EVERSOLE: Don't figure.

MR. SMITH: The technology, this is not a statement, that first sentence is not a statement that the technology is far more capable than it actually is.

A But you're leaving out an adjective and I'm just not going to, you know, the statement I meant is when Elon Musk tells his engineers to fake a video that goes viral on the Internet to make a car look like it's driving around the city and they



faked the test and they faked the video, that is a public statement.

BY MR. SMITH:

Q So let's talk about what Tesla said that this driver and whether or not any of those statements indicate that the technology is far more capable than it actually is and that first one is, that first sentence that says this is a driver assistance feature and does not make your vehicle autonomous. And my question is not anything but, is that a statement that the technology is far more capable than it actually is, is it?

A I, you would have needed to define autonomous for the driver. I don't know that every single driver would understand this sentence. When you say -- autonomous can mean a lot of different things to a lot of different people.

Q Okay. But this says it's not autonomous, right, so this is saying not that it is autonomous, that can mean a lot of different things, it's saying it's not autonomous. And then it goes on to say, please use it only if you will pay attention to the



road, keep your hands on the steering wheel and be prepared to take over at any time. That does not overstate, I'm sorry, that is not a statement that the technology is far more capable than it actually is, is it?

MR. EVERSOLE: Object to the form. Asked and answered.

A I think a driver is very confused when they see Elon Musk on "60 Minutes" not keeping his hands on the steering wheel and making videos that show just how much the car can drive by itself. So people tend to be visual creatures and so I think it's confusing for drivers if they're seeing Elon Musk driving with no hands on, they're seeing videos on the Internet with no one, with people driving with no hands on, they see that and then they don't read this.

BY MR. SMITH:

Q And did Mr. Banner see any of those videos that you just mentioned?

MR. EVERSOLE: Object to the form.

A I can never say whether or not Mr. Banner



1 saw those.

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BY MR. SMITH:

- O You don't know?
- A I don't know.

Q Okay. I just happen to, this is not going to be an exhibit because I just pulled it up, I just pulled up the driver manual for Florida. And in the first paragraph under preparing to drive, it says you dash the driver, it says, driving an automobile is a huge responsibility, in order to drive safely, you must be fully engaged, hands on the wheel, eyes on the road, mind on driving. And isn't that exactly what is being told to the driver here about Tesla? Use only if you will pay attention to the road, keep your hands on the wheel and be prepared to take over at any time, isn't that --

MR. EVERSOLE: Objection to form.

Objection to form.

A I agree that this is what you tell your driver, but then if you would put some technology in the car to actually keep people's hands on the wheels, then this would be a much more successful



1 | endeavor.

BY MR. SMITH:

Q So that's a whole other category of your opinions, we're going to get to that. What I'm talking about is statements that you say indicate technology is far more capable than it actually is and I know what you're talking about, what I want to ask you about is whether these do, the next item here says, auto steer is designed for use on highways that have center dividers, lane, clear lane markings and no cross traffic, right? Is that an incorrect statement in any way?

A I agree that this is what Tesla says on its introductory screen. If they were serious about safety then they would not allow autopilot to operate in domains where it is not qualified to operate.

And again, that's another opinion, don't, I'm trying not, trying to keep from you changing the subject to another opinion, because we're going to get to those, what I'm truly trying to get to about, here, is the things that Tesla said not only



publicly, but said to this driver and their statements are in these agreements that come up on the screen and then owner's manuals and I'm just trying to make sure that I understand what we know Mr. Banner had in his hands at least, he had available to him, right, and he had that available to him?

MR. EVERSOLE: Objection to form.

A So my statement does not say anything about, my opinion does not say anything about individual statements, that first block in this is very clearly talking about public statement.

BY MR. SMITH:

Q I understand exactly that. What I'm trying to do is to understand if any of your criticisms of the public statement also apply to the language that the driver is specifically provided with.

A Nowhere in my new opinion does it talk at all about individual statements.

Q I know. So I'm going through these individual statements to ask you whether or not they



1 indicate the technology is far more capable than it actually is, here it does not, correct? 2 3 But this is not one of my opinions. Okay. But it's, you are talking about 4 0 5 statements. No, I'm talking about public statements. Α 6 You are talking about a set of statements 7 0 that are public statements, and --8 To more than one person at Α And that you say can create confusion, 10 0 11 right? Agreed. 12 Α So what I want to look at is what the 13 0 statements are that are actually made to the driver 14 15 to see if they are at all confusing, because this is not confusing. 16 17 I have agreed, this is confusing. 18 this statement is long, it's wordy, it doesn't 19 exactly drive -- define what autonomous is. 20 would I have, do I think that this would have been a 21 good statement to give to the driver on the

introductory screen, no.

	KIM BANNER
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5	BY MR.
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So --

MR. EVERSOLE: I'm going to object to the rm, as you're testifying. Object to form. ur opinions.

SMITH:

Keep your hands on the steering wheel not confusing, that statement?

If you're asking me does the phrase keep nds on the steering wheel, is that confusing, ot confusing to me, but it is embedded within emely wordy paragraph that it is very y the drivers read.

And please, it says, please use it Okay. you will pay attention to the road.

I do appreciate that they're very polite.

They're pleading with the customer to pay attention to the road, aren't they? that's not confusing.

> MR. EVERSOLE: Object to the form.

But if you're seeing the CEO on television and on the Internet not using his hands and you're seeing advertisements about just how much the car

can drive without hands on the steering wheel, I do 1 think it becomes very confusing. 2 BY MR. SMITH: 3 Can you point to a place where anybody at 4 5 Tesla has said that the auto steer system in the 2018 model S does not require hands on the wheel? 6 I have not seen a specific statement that 7 Α has exactly that language, no. And you hadn't seen one where someone says 9 Q that autopilot doesn't require you to have your 10 11 hands on the wheel? Yes, I've seen Elon Musk do it on "60 12 13 Minutes". But in that didn't he say this is a 14 hands-on system and wasn't he on a closed circuit so 15 that he could demonstrate this? He wasn't out on 16 the freeway with his hands off the wheel, was he? 17 It was very much a wink --18 MR. EVERSOLE: Objection. 19 20 -- and a nod. Α 21 BY MR. SMITH:

But he didn't say it, so you're, so --



1	A He took his hands off the steering wheel
2	and Leslie Stahl called him on it, so, yes, I've
3	seen that.
4	Q Yeah. Did he say anywhere in that that
5	this is a hands-off system?
6	MR. EVERSOLE: Object to the form.
7	A I did not hear him say it in that
8	interview.
9	BY MR. SMITH:
10	Q Have you heard him say it anywhere?
11	A I think actions speak louder than words.
12	MR. EVERSOLE: Form.
13	BY MR. SMITH:
14	Q I'm asking you about the words right now.
15	Have you ever seen him or heard him say, or anyone
16	at Tesla say that autopilot is a hands-off system?
17	A I never read in any document where anyone
18	asserted specifically that it was a hands-off
19	system.
20	Q All right. Now, you know GMC Super Cruise
21	is a hands-off system, right? Can we refer to it as



that?

- A Yes. The industry calls it hands-free.
- Q Hands-free, okay. We'll call it hands-free. And there is no representation made that auto steer in 2018 was hands-free?

A That is not entirely true. The owner's manual is very clear that if you take your hands off, it will alert you in some period of time, so this is where the confusion is. Drivers know and indeed they're told in the owner's manual that if they take their hands off, they will eventually be notified and indeed they get three strikes before the system intervenes. So the system does not reinforce that you should always be hands-free or hands-on, it encourages you to sometimes be hands-free.

- Q Okay. That's another one of your opinions we're going to get to in a minute but what I want to get to is the, the statements, are there statements in the owner's manual that refer to this as hands-free?
 - A There are many mentions -MR. EVERSOLE: Form.



1 Α -- of hands-free in the system but it is, the owner's manual is very clear that you can take 2 your hands off the steering wheel for periods of 3 time. 4 BY MR. SMITH: 5 I think I've got the wrong owner's manual 6 here but this is saying, this is a 2018 autopilot. 7 Look at page 65. And you see this is about 8 autopilot. See at the top? 9 10 Α I do. And down at, under limitations, one, two, 11 the first warning, you see that? 12 13 Α Um-hum. It says, never depend on the components to 14 15 keep you safe, it is the driver's responsibility to stay alert, drive actively and be in control of the 16 vehicle at all times, right? 17 It actually says drive safely and be in 18 control of the vehicle. 19 What did I say? I'm sorry, I read that 20 21 wrong. Let me just go back and read it correctly.



Okay.

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Q Thank you. It says, never depend on these components to keep you safe. It is the driver's responsibility to stay alert, drive safely and be in control of the vehicle at all times, right?

A I agree and it would be, it's confusing for the driver that they can take their hands off

for the driver that they can take their hands off the wheel for significant periods of time.

Q Okay. And that's exactly what, most exactly what was said in the driving training manual, isn't it?

A I'm sorry?

Q Keep your hands on the wheel and your eyes on the road.

MR. EVERSOLE: Form.

BY MR. SMITH:

Q Let's turn to the text page, look at page 67. And I've highlighted it for you there. It says, traffic-aware cruise control does not eliminate the need to watch the road in front of you and to manually apply brakes when needed, correct?

A Yes, that's what it says.

Q And it says, primarily intended for



driving on dry straight roads such as highways and freeways, right?

A So that's very confusing because in this statement that you just gave me on the screen, it says, it should not be used on highways that have very sharp turns and it's designed for use on highways with no cross traffic. So the warning that you just read to me is actually counter to what you're saying here and so this is a perfect illustration, thank you, of the confusing messages that the driver is receiving.

Q Yeah, I think you're confused. Because the document you have in your right hand, which is Exhibit 5, left hand, says auto steer.

A I totally get it. I totally get it.

Q And what we're in is the traffic-aware cruise control.

A And I hear you but, so, this is where the driver starts to get confused. The driver sees traffic-aware of cruise control, this set of messages, and so you're expecting a driver with no formal training to remember that there's all these



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places that traffic-aware cruise control can't operate, and then you gave them some other information about auto steer. And so, again, you're recommending to a driver who is not a trained expert driver, not a test driver, to all of a sudden start managing significant different messages that have, that seem to be counter to one another. It's very confusing for a driver.

Q Okay. Let's go on to --

MR. EVERSOLE: I'm going to object to the form of that question and move to strike your testimony during that question.

MR. SMITH: What did I say?

MR. EVERSOLE: She said she was confused.

I think it was improper, maybe it was a little bit rude.

MR. SMITH: Rude?

MR. EVERSOLE: Yes. Rude.

MR. SMITH: I was pointing out that she was referring to the wrong section, that auto steer and traffic record, cruise control, were two different things and she was referring.



1 Α I'm used to mansplaining. MR. EVERSOLE: Your definition of rude is 2 3 different than mime. That's fine. You use yours, but I think it's rude and I move to 4 5 strike it. That's all. BY MR. SMITH: 6 All right. Let's, let me just say I don't 7 mean to be rude. I mean to be accurate, but I don't 8 mean to be rude. I was trying to be accurate to 9 point out that what you had in your left hand was 10 talking about auto steer and what you had in your 11 12 right hand was about traffic-aware cruise control. And, Joel, I'll tell you like I tell my 13 Α teen daughter, let me finish. 14 15 All right. Do you mean let me finish, you 16 have more to say? 17 No, let me finish. Like, I'm trying to 18 explain to you that yes, I recognize that one is about TACC and one is about auto steer but now you 19 20 start to have all of these different conditions and

you're expecting you, you give the driver all the

warnings on the screen about all auto steer, you



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give them another bunch of warnings about traffic-aware cruise control and you're expecting someone who got no training, who went to the dealership, they're learning everything basically either by videos online or trial and error to try to understand how to balance these limitations and constraints in the system.

Q Okay. So let's turn to page 68. There's a warning there for traffic-aware cruise control, and it says, traffic-aware cruise control cannot detect all objects, especially in situations where you're driving over 50 miles an hour, right?

A I agree that's what it says.

Q And it says, it may not brake, decelerate when the vehicle or object is only partially in the driving lane or when a vehicle you're following moves out of your path and is stationary or slow moving vehicle or object is front of you, right?

A I agree that's what it says.

Q Okay. And that's not an overstatement, that's a limitation? That's not an overstatement of the technology being far more capable than it



actually is?

A I would say --

MR. EVERSOLE: Form.

A I would say it's a clear statement of the operational design, domain, that autopilot does not work in so it begs the question why you would even allow people to drive in autopilot in a scenario where you know it's not capable.

BY MR. SMITH:

Q And I know you want to get to that and we're going to get to that, I promise you we're going get to that, but what I'm trying to do is ask you whether or not this is something that overstates the capability of the machine.

A It is a statement of the machine's, a set of limitations which I would like to also point out is confusing and not in keeping with the statement that is on the screen for the driver when they originally accept to drive in autopilot.

Q All right. Let's look down at the last sentence of that paragraph. It says, always keep your eyes on the road when driving and be prepared



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to take corrective action as need. That's not unclear, is it?

A I agree that that is a statement that is buried inside your model, I'm not even sure this is correct.

Q This is three, but it's the same.

A Right, okay. So I don't know if this is exactly in the model S 2018, but I agree that that is what is in the manual.

Q All right. Let's flip over to page 73, which is about auto steer. And we were really focused on whether this was a hands-free system.

And if we look at the first warning under auto steer it says, auto steer is a hands-on feature. You must keep your hands on the steering wheel at all times, right?

A I agree that's what it says. It is curious why it is allowed to be operated while you're allowed to operate hands-free if the requirement is to keep your hands on.

Q Did other -- in your -- and what I'm trying to do is understand if you've changed your



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testimony from previously?

- A None of this has changed.
- Q All right. So with respect to the question I'm about to ask, previously you said that the only other vehicle, a 2018 model year that had auto steer was the Cadillac. Do you remember saying that?

A Yes, I don't remember if I was talking at that time about as a competitor to Tesla. I know the Mercedes also had it, the forward, whatever, S class, but I was talking about competitors to Tesla.

- Q All right. Go to 118.
- A Of my deposition?
- Q Yes, sorry. And I'm just trying to make sure this is the same. We were talking about driver monitoring like we are now, and this says, Tesla driver monitoring system should only be compared to Cadillacs because these are the only two cars, especially in 2019, that had the capability for auto steering. Is that a correct statement?

MR. EVERSOLE: Object to the form. Is this an update deposition or are you



1 cross-examining her on the last deposition? 2 MR. SMITH: I'm not cross-examining her, I'm asking her to update her testimony on that 3 issue if that, if she thinks that's correct. 4 MR. EVERSOLE: No, you are not asking her 5 about an update. You're asking her if that's 6 correct at that time. That's --7 BY MR. SMITH: 8 Well, in 2000, in this model year, what 9 10 vehicles had auto steer? In -- the Mercedes S Class 480 or whatever 11 that, I know that they also had a version of auto 12 steering but if I recall, we were talking about 13 driver monitoring systems and I was referencing 14 15 Cadillac because I think Cadillac has a superior driver monitoring system. So that is why I'm 16 talking about Cadillac in this case. 17

Q Yeah, and I think what you said, and I'm not trying to cross-examine you on your prior testimony, but I've read it recently, so I think you were talking about the driver-facing camera issue which is another one of the boxes in your Exhibit 2.



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And you said that this vehicle should only be, that

Tesla should only being compared to Cadillac because

it was the only one, other one that had auto

steering.

MR. EVERSOLE: Do you want her to update that question?

BY MR. SMITH:

Q I want to know if that is, if your research has indicated since then that there are other vehicles that have auto steer in their 2018 model year.

A So let me be clear since we're updating, Mercedes did have the capability, but in this vein, we were talking about I was comparing Tesla to Cadillac because we're discussing what should a driver monitoring system be if not just a torque monitoring on the steering wheel.

Q Right. And what I wanted to know is what other vehicles had auto steer, and what other vehicles that had auto steer used as a driver monitoring system. Have you done any --

A Yes, I know the Mercedes.



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- Q Wait, wait, wait. You are going to have let me finish.

 A Okay. You're right.

 Q And that was a joke, right?
 - A Right.
 - Q We were not, I was not being rude.

 A My daughter would have said it the same

way.

Q Okay. So what I'm wanting know is have you done any additional work since your last deposition to determine whether there were other vehicles other than the Cadillac that had auto steer capabilities and what their driver monitoring systems were?

A Yes, the Mercedes I have done, and the Mercedes S Class does have automated steering and it also uses, badly, a torque monitoring system in the steering wheel.

Q Okay. So when we say automated steering, we're really talking not about lane keeping but lane-centering technology, right?

A I am specifically -- when you talk about



1	ADAS systems.
2	Q Um-hum.
3	A There are safety, clear safety ADAS
4	features.
5	Q Um-hum.
6	A Automated emergency braking, lane-keeping
7	warnings, and then there's the convenience features,
8	which I describe as lateral and longitudinal
9	control. So it's not just lane centering, it's the
10	ability to actually execute lane changes.
11	Q Okay. But in terms of auto steer, it's a
12	lane-centering technology with, it's a
13	lane-centering technology?
14	A I that would just be one piece of the
15	auto steer.
16	Q Okay. And there's no lane change issue in
17	the Banner case?
18	A I would agree that the car did not change
19	lanes.
20	Q Okay. I mean, it just kept going
21	straight?
22	A Yes, full speed broad side.



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Q I understand that. So the lane -- what other vehicles that you're aware of, just to be clear, if your research has updated this, has had in 2018 a lane-centering technology that could also be used with adaptive cruise control in the way that Tesla does? And you mentioned the Mercedes.

A Yes.

Q You mentioned the Cadillac.

A You know, to my knowledge, I would say that those were the only two that were available on the market in the United States at that time.

Q In '18?

A Yes. You know, I can't know all cars, all capabilities everywhere.

Q Um-hum.

A But I think those were the ones that were commercially available.

Q All right. And the two that you know that were commercially available in the United States that were hands-on, the Mercedes and the Tesla, both used a steering wheel torque driver monitoring system, right?



1	A That's correct.
2	Q And the Cadillac could not use the
3	hands-on drive monitoring system with a hands-free
4	system, does that make sense, right?
5	MR. EVERSOLE: Object to the form of the
6	question.
7	A If you're asking did they use a torque
8	monitoring system the answer is no.
9	BY MR. SMITH:
10	Q They couldn't, though, could they? If
11	they were going to have a hands-free system, you
12	can't monitor hands off the wheel as a way of being
13	a driver monitor, right?
14	A You could. I'm not sure, you know, you'd
15	have to ask that design question of Cadillac.
16	Q Okay. I'm just I didn't think this was
17	a design question. I thought that if you had a
18	system where you allowed the driver not to have his
19	hands on the wheel, monitoring for driver attention,
20	based on whether or not you have your hands on the
21	wheel would not monitor the thing you needed to

monitor, would it?

1	MR. EVERSOLE: Form.
2	A You know, this conversation is confusing
3	to me. It is very possible that if you wanted to
4	design a system that allowed someone to be
5	hands-free, you also need to know when they do have
6	their hands on the wheel, so can you combine torque
7	monitoring with an internal camera to monitor the
8	driver, the answer is yes.
9	Q In a hands-free system?
10	A Yes.
11	Q Okay. All right. Take a break?
12	MR. EVERSOLE: Sure.
1,3	THE VIDEOGRAPHER: Going off the record.
14	The time is 12:27.
15	(Whereupon, there was a break from
16	12:27 p.m. until 12:47 p.m.)
17	(Whereupon, Exhibit No. 6 was marked for
18	identification.)
19	THE VIDEOGRAPHER: Going back on the
20	record. The time is 12:47.
21	BY MR. SMITH:
22	Q Okay. Let's just to back to that Model 3



1	manual right here, which is Exhibit 6. And go to
2	page 73. And that's the first page of the auto
3	steer section, correct?
4	A Um-hum.
5	Q And the first warning says auto steer is
6	hands-on feature, you must keep your hands on the
7	steering wheel at all times, right?
8	A Yes, but it does in the paragraph previous
9	that you had highlighted, it is important to note
10	that auto steer builds upon traffic-aware cruise
11	control.
12	Q Right. They operate together.
13	A That's right.
14	Q So auto steer I'm sorry. Can auto
15	steer work without traffic-aware cruise control?
16	A I don't think it can.
L7	Q Can traffic-aware cruise control work
18	without auto steer?
19	A Yes.
20	Q Okay. So when it says it builds on it, it
21	has to be operated, auto steer has to be operated

when traffic-aware cruise control is being operated?



Yes, that's exactly why warnings, warning 1 Α 2 messages need to address both at the same time instead of one individually. 3 So in order to activate auto steer, you 4 0 would, it would activate --5 6 Α I'm sorry. That's all right. 7 A · I'm fine. Allergies. 8 I do the same thing. Take a minute. 9 0 10 qood? 11 Α Um-hum. So in the auto steer section it 12 says auto steer is a hands-on feature and you must 13 have your hands on the steering wheel at all times, 14 15 right? Except for later caveats that you can have 16 17 your hands off the steering wheel for brief periods 18 of time. It doesn't say that, though. It doesn't 19 say that you can have your hands --20 2.1 Α Not exactly here.

Nowhere does it say --



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A Well, it will say, there is a section, and if you'll give me a moment on the next break, I'll get it exactly, where it will remind you if you take your hands off. And you can have your hands off for a long time in this car.

Q Okay. So what you can do, and what you're instructed to do, are different things. What this instructs you to do is to keep your hands on the wheel at all times, correct?

A It does say you must keep your hands on the steering wheel at all times, but then it allows you to keep your hands off the steering wheel for significant periods of time.

Q In 2018, the other hands-on systems, the Mercedes, did it allow you to have your hands off the wheel for some period of time?

A Yes.

Q And was that time longer than 30 seconds in some circumstance?

A Yes.

Q Was there ever any time that it was less than ten seconds?



1	A I have not done extensive testing of the
2	Mercedes, so I cannot say unequivocally that it's
3	never, it never warns you until ten seconds. I do
4	not know that that is true.
5	Q Okay. But you don't know what the minimum
6	is?
7	A No, and it doesn't say anything in the
8	manual.
9	Q Okay. The manual of Mercedes?
10	A Mercedes, um-hum.
11	Q Okay. This says auto steer, the next
12	warning there?
13	A Um-hum.
14	Q Says auto steer's intended for use on
15	highways and limited access roads with fully
16	attentive driver, right?
17	A Yes.
18	Q And that's consistent with what this
19	Exhibit 5 says about auto steer, correct?
20	A I would agree that many of the words in
21	this warning, also appear on the initial screen



warning.

The, what was Mr. Banner driving? 0 Okay. 1 Α A 2018 Model 3S (sic). 2 Model 3S or Model S or Model 3? 3 0 I mean -- I'm sorry. Model 3. Α 4 5 0 So it's a Model 3? Α Yes. 6 So we got the right owner's manual 7 0 Α 8 Yes. 9 Q Okay. it's the same. It -- I'm not sure if 10 Α doesn't look like the same one I have from 2018, 11 12 though. I think this is the one that was 13 Q Okay. produced in the case, so. 14 15 Α Okay. It should be the one you have, I mean, if 16 you got the one that was produced in the case. So 17 we talked about what comes up the first time, 18 Exhibit 5, that you turn on the vehicle, we talked 19 the about what's in the owner's manual with respect 20 21 to the requirements for attention and hands on the

wheel. Every time that the operator activates auto

1 steer, does the operator get a message on the dashboard? 2 3 Α I think they're supposed to. And do you know what that says? 4 Basically, something to the effect of keep 5 your hands on the steering wheel. 6 (Whereupon, Exhibit No. 7 was marked for 7 identification.) 8 BY MR. SMITH: 9 10 0 Okay. I'm going to show you Exhibit 7 and 11 ask you if that is a fair representation of what is said when what the car is telling the driver when it 12 activates when a driver activates the auto steer? 13 MR. EVERSOLE: Objection. 14 15 I agree. Α 16 BY MR. SMITH: 17 And if this driver had activated auto 18 over 50 times, over 50 times he would have 19 read or would have been given the opportunity to read, please keep your hands on the wheel and be 20



prepared to take over at any time?

MR. EVERSOLE: Object to form.

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BY MR. SMITH:

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O Correct?

A I agree this is what it says, but it is not in keeping with the owner's manual which says you must keep your hands on the steering wheel. So whereas one is a gentle inquiry, the other one is more of a command so I would argue that you probably should, it would be better if these messages were aligned.

Q So because they said please, it --

A No. It just says please keep your hands on the wheel as opposed to you must keep your hands on the wheel.

Q Okay. And ten seconds before the crash, Mr. Banner would have gotten that message? 9.9?

A Yes.

Q Okay. I have the owner's manual for the 2018 Mercedes S Class, and I only have one copy of it because it's really big.

A I have an electronic copy.

Q Oh, you have it electronically. All right. Good. Well, let's make this Exhibit 8.



(Whereupon, Exhibit No. 8 was marked for 1 identification.) 2 BY MR. SMITH: 3 And I have tabbed the areas that deal with 4 the technology of the S Class and I'm going to hand 5 it to you. You don't have to refer to it because 6 you probably already know these, the answers to 7 these questions, but it is there for you to refer to 8 it if you'd like, okay? 9 Α Okay. 10 With respect to the S Class, does it use a 11 12 camera to detect and attention? 13 Α No. Does it allow for activation of its driver 14 15 assistance which includes lane centering and 16 adaptive cruise control, out of an ODD? I have not extensively operated one of 17 things so I can't say for sure that it does. 18 Okay. You don't know whether it's 19 0 20 restricted to ODD or not? 21 I don't know if there's technology inside



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of it that restricts it.

1	Q All right. If there's no restriction to
2	ODD, that's the same as Tesla?
3	A When you say the same as Tesla, what do
4	you mean?
5	Q Tesla doesn't restrict an ODD, right?
6	A So are you saying that Tesla puts no
7	constraints on where its technology can be used?
8	Q No, that's not true. Because there are
9	speed reductions in certain conditions.
10	MR. EVERSOLE: Object to the form.
11	BY MR. SMITH:
12	Q I'm not, I'm not saying that. Actually,
13	I'm not saying anything, I'm asking a question.
14	MR. EVERSOLE: I didn't hear.
15	BY MR. SMITH:
16	Q Is auto steer, autopilot, restricted to an
17	ODD, to an area?
18	A By policy or by technology?
19	Q By technology.
20	A I am not aware of any technological
21	restrictions that prevent you from engaging
22	autopilot in certain areas.



1 0 So this says, I'm reading your opinion. It says allowance of autopilot use. You say AEP, 2 but that 's autopilot, right? Allowance for 3 autopilot use out of stated ODD, 50 miles per hour 4 where cross traffic is a major issue, right? 5 That's right. 6 А So is there an allowance, does the 7 Mercedes allow for its system to use, to be used out 8 of an ODD that it states are out of an ODD where 50-mile-an-hour traffic is allowed in cross traffic? 10 A I'm not aware in the S Class manual that 11 it makes such a specific statement. It does warn, 12 unlike Tesla, the manual does warn you that it will 13 never brake for --14 Cross traffic? 15 0

A Any kind of cross traffic. Whereas Tesla's manual says it may not brake.

Q Okay. But we know that the S car doesn't brake for cross traffic?

A Yes, indeed, the manual is quite clear about that, unlike Tesla's.

Q Okay. Okay. And this, another one of



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your opinions under the sort of bottom left corner
of gross negligence says, not alerting drivers that
the car is no longer in ODD, there's no such alert
for the S Class, is there?

A That is correct.

Q Okay. All right. I'm going to show you another 2018 owner's manual. And this is for the Lexus G 350, and I'm going to refer you to page 251, it's the tabbed page.

A Okay.

Q I'm going to let you read that but my question is going to be does this Lexus have lane-centering technology that works in conjunction with adaptive cruise control?

A It says radar cruise control, so, you know, not, it is a form of whether or not you really want to say adaptive, I don't see the word adaptive here anywhere. I do not consider -- lane centering is not the same as lane changing.

Q I agree. Lane centering, though, is the same as auto steer, right?

A I mean, that's debatable.



Okay. But this is technology that keeps a 1 0 2 vehicle in the middle of the lane and regulates your speed based on vehicles in front of you. 3 Α Okay. I don't, I don't put this car in 4 5 the same class as the Tesla autopilot. I'm sure Tesla will be happy to 6 Okay. But that is a vehicle that has a 7 lane-centering technology that works in conjunction 8 with radar cruise control, correct, it says so right 9 10 there? 11 MR. EVERSOLE: Form Yes, it is a lane-centering technology. 12 Α 13 BY MR. SMITH: All right. And it uses what's called a 14 15 user monitor, it's user monitoring system or driver monitoring system is detected by steering wheel 16 17 torque? 18 Yes. 19 Just like -- similar to --20 Um-hum. Α 21 0 And that's a 2018?



Okay.

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Q Fine. So let me show you another. 1 2 we'll make Exhibit 8, did I say -- thank you. That's not eight, this is nine. 3 (Whereupon, Exhibit No. 9 was marked for 4 identification.) 5 BY MR. SMITH: 6 7 So the Mercedes is eight and the Lexus is 0 nine. I'll put it back in a folder, excuse me. 8 then we'll make Exhibit 10 the 2019 Nissan Leaf, and 9 10 I've got that system, the page is marked for that as well. What they call steering assist is on page 5 11 12 dash 102. 13 (Whereupon, Exhibit No. 10 was marked for identification. 14 15 BY MR. SMITH: 16 And, again, this is lane-centering 17 technology with a radar cruise control and they use, 18 they don't use a camera to detect and attention, 19 they use steering wheel torque, is that right? 20 It is correct. But it is not in the same 21 class as Tesla autopilot. 22 Okay. And what's the reason it's not in Q



1	the same class?
2	A It's very different for your car to have
3	lane centering versus lane changing.
4	Q All right. Does this have lane changing,
5	do you know?
6	A I've not driven the 2019 Leaf, so I don't
7	know. I doubt it, though.
8	Q All right. Okay. Does the Lexus have
9	lane-changing capabilities?
10	A I don't think so. But I would have to
11	double-check.
12	Q Okay. If it does have, if the Leaf and
13	the Lexus have lane changing would that make them
14	like Tesla, like autopilot?
15	MR. EVERSOLE: Form.
16	A So cars that are like Teslas are those
17	that have lateral and longitudinal control.
18	BY MR. SMITH:
19	Q Um-hum. So lateral control would mean
20	like lane centering and longitudinal?
21	A And lane changing.
22	Q And lane changing. Okay. And



1 longitudinal would mean radar cruise control, adaptive cruise control, whatever we want to call 2 3 it? Right. 4 Α Right. How about the Volvo? 5 It has something called pilot assist. 6 In 2018? 7 Α Um-hum. Do you know if that's like the 8 Tesla? 10 Α I don't think it is. 11 0 Okay. Because it doesn't have 12 lane-changing technology? That's correct. 13 Α Not in 2018. If my memory serves correct. 14 15 0 Okay. Many of these cars that you're mentioning 16 17 are, either have those technologies now or trying to develop those technologies now. 18 19 0 The lane-centering technology along Okay. 20 with the traffic-aware cruise control, did those 21 create complacency just on their own without the

lane-changing technology?

MR. EVERSOLE: Object to the form. 1 I, I think that as we discussed in my 2 3 earlier deposition, ACC does induce, can induce complacency. 4 BY MR. SMITH: 5 So I'm going to hand you the Um-hum. 6 0 Volvo with some pages marked, that ought to be the, 7 and that's going to be exhibit, let me take some of 8 this out of your way, that's going to be Exhibit 11. 9 (Whereupon, Exhibit No. 11 was marked for 10 11 identification.) 12 BY MR. SMITH: And I've kind of highlighted and tabbed 13 those if you want to just flip through that to 14 refresh yourself on what the Volvo has. 15 16 Okay. It looks like lane centering. Which they call pilot assist? 17 18 Yes. And it's clear that they're not using 19 camera for detection and --20 21 Α That's correct. There's a number of cars



that use torque monitoring, yes.

1	Q So really in terms of the ones we looked
2	at, the only one that uses a camera is the Cadillacs
3	for driver monitoring, right?
4	A In 2018.
5	Q Yep, when this vehicle was made. And
6	Cadillac is the only one that has a representation
7	that it's hands-free of the ones we looked at?
8	A In 2018.
9	Q Right. When this vehicle was made?
10	MR. EVERSOLE: Form.
11	A I'm not sure when the vehicle was made.
12	BY MR. SMITH:
13	Q The model year of this vehicle?
14	MR. EVERSOLE: Form.
15	A Yes.
16	BY MR. SMITH:
17	Q So let's go back and make sure this is
18	clear. Of the 2018 model year vehicles that we've
19	looked at that have an auto steer component which is
20	lane centering and longitudinal component which is

radar cruise control, all except the Cadillac with

super cruise in 2018 model year use torque



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1 | monitoring with the steering wheel?

A I'd have to go back and look at it. I'm not sure that that's correct. There are many, many cars out there, so.

Q Oh, I'm sorry. Maybe I'm, let me fix that question, okay? The ones we've looked at, the Nissan, Lexus, Mercedes, Volvo, Tesla, that have a lane-centering capacity operating at the same time as adaptive cruise control, all of those, except the Cadillac, have driver monitoring at the base --

- A Of the ones we discussed today?
- Q Based on the steering wheel torque?
- A Of the ones we've discussed today, that is correct.
- Q Okay. And the only one that uses a camera is the Cadillac, driver-facing camera?
- A Of the ones we discussed today, that's correct.
- Q All right. Are you aware of another 2018 model year vehicle as we sit here that used a camera-facing driver monitoring system?
 - A I would have to go back and look.



Q As we sit here today, you can't recall one?

A Not off the top of my head.

Q All right. And as we sit here today, can you identify any other vehicles that have this combination of two components that operate together, radar cruise control, active cruise control, whatever we're going to call that, and a lane-centering technology. Can you identify any other vehicles that don't use the driver steering wheel torque monitoring?

A I don't consider cars that just do lane centering to be in the same class as Tesla.

Q I understand. That wasn't my question. You've said that and I'm very clear on that, don't get me wrong. I'm just asking you if you are aware of, for my benefit, any cars that use lane centering in conjunction with or at the same time as a radar cruise control or adaptive cruise control that have a monitoring system other than the Cadillac that is not steering wheel torque?

A I don't know of any off the top of my head



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Q Okay. Of all of the vehicles we've just looked at, their owner's manuals, are you aware of any of those, other than the hands-free Cadillac system, that allows the activation of the two systems working together in -- outside of an ODD?

- A So what two systems do you mean?
- Q The two we've been -- I'm --
- A I just want to make sure, I'm not really sure I follow your question.
 - Q Okay. I'll make it more clear.

Are you aware of any vehicle from 2018, model year, that allows the operation of lane-centering technology and adaptive cruise control at the same time that allows, that restricts the vehicle to an ODD, other than the Cadillac?

A No. I don't.

Q Okay. Are you aware of any vehicle, sorry, I'll start over.

Are you aware of any 2018 model year vehicle that uses, that has a system of lane-centering technology used in conjunction with

adaptive cruise control that alerts drivers that the 1 2 car is no longer in an ODD? 3 · I can't say, I haven't driven all those A cars, so I can't say for sure one way or the other. 4 5 Can you tell me one? I'd have to test one of those cars to know 6 that. 7 So as we sit here today, you don't know 8 whether any car in 2018 has that? 9 10 MR. EVERSOLE: Object, asked and answered. 11 BY MR. SMITH: 12 0 True? 13 Α I don't MR. EVERSOLE: Object to the form. 14 15 Α at this time. 16 BY MR. SMITH: 17 All right. And you said that there's a specific statement in the owner's manual of the 18 19 Mercedes that says it does not detect and stop for 20 cross traffic? It will not brake. 21 Α

It will not brake for cross traffic?

1	A It's either cross traffic and/or
2	obstacles.
3	Q Is that something you can find?
4	A On the brake.
5	Q And the Cadillac's owner's manual
6	specifically does mention cross traffic, identifies
7	cross traffic, right?
8	A It's not allowed to be on an ODD where
9	there would be cross traffic.
10	Q But it also says in there it doesn't stop
11	for cross traffic?
12	A I would have to go back to look exactly,
13	but it's not in the ODD that operates it.
14	Q I'll just, I'm going to make this
15	Cadillac, what are we, 11, 12? I'm going to make
16	this Exhibit 12, this is the Cadillac CT6 manual.
17	(Whereupon, Exhibit No. 12 was marked for
18	identification.)
19	BY MR. SMITH:
20	Q I'll just refer you to page 257, where it
21	says that it does not respond to crossing or
22	oncoming traffic. It's referring to super cruise



1	views.
2	A I'm just going back to the context.
3	MR. EVERSOLE: Let her read it.
4	MR. SMITH: Yeah, yeah.
5	A I agree that's what it says.
6	BY MR. SMITH:
7	Q Okay. So the Cadillac mentions cross
8	traffic, the Tesla owner's manual doesn't mention
9	cross traffic but cross traffic is mentioned in the
LO	agreement, right?
11	A That's correct.
12	MR. EVERSOLE: Form.
13	BY MR. SMITH:
L4	Q And the Tesla owner's manual says that
15	vehicles that are partially in your lane you might
16	not stop for?
L7	A May not stop.
18	Q May not stop for. Okay. And I didn't see
19	cross traffic in any of the others, I'm just, that's
20	why want you to show me where it is in the Mercedes.
21	You're probably right, I'm confident you are, but I



just want to find that.

1	Okay. For what it's worth, my box is
2	getting kind of empty, isn't that a good thing?
3	MR. EVERSOLE: That is a good thing.
4	MR. SMITH: Getting kind of empty.
5	BY MR. SMITH:
6	Q I want to turn to the issue of distraction
7	for a minute and ask you if you've done any
8	additional work since your last deposition to
9	determine whether or not Mr. Banner was distracted,
10	in addition to what you said, I'm not asking you to
11	rehash what you said before.
12	A No, I've not done any additional work on
13	Mr. Banner.
14	Q Back briefly to this report that came out
15	in 2000, this Exhibit 3, which is a report that came
16	out since your deposition, in December, right? And
17	you said that 6.1 percent of people using cell
18	phones that were, according to NHTSA, caused by or
19	attributed to, crashes were caused by or attributed

- A I didn't say it, you did.
- Q Okay. That's probably a really



to cell phone use?

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inarticulate way of asking a question. So you're

probably right. Let me -- the NHTSA report used the

term attributed when it said 6.1 percent of the, of

crashes were attributed to cell phone use,

distraction of cell phone use, right? You remember

that, I'm just trying to --

A Yes, I do remember your reference.

Q Okay. And those people weren't all complacent because they were using an ADAS system, right, in 2019?

A So this is one of the problems that this data. We have no way of knowing whether or not ADAS was engaged for those cars that even were equipped with some feature of ADAS, moreover what features of ADAS were used at that time.

Q Okay. But --

A Indeed, the only data that's useful for this context would be that of the standing general order which Tesla is over-represented in.

Q So if we look at crashes where there's not a ADAS system, but there is a crash attributed to cell phone use, in a single crash, the driver is



using a cell phone and shouldn't be, correct?

A Presumably, again, this was not my study, so I can only go by what they said.

Q Okay. But of all of the people who were killed in crashes like this, the overwhelming majority of them in 2019 would not be in vehicles with ADAS, right, and certainly not in vehicles with autopilot?

A So this is very confusing and you raise a very important point that what it means to have an ADAS means different things to different people. So you can have AED and technically be considered to have ADAS.

Q Good point

A So AED, yes, collision warnings, lane departure warn -- like any kind of warning counts as ADAS. So this is a huge problem with the SAE standard and even though it phrased ADAS.

Q Fair statement, my inarticulate use of the term ADAS. So let's just talk about vehicles that have lane-centering technology that works in conjunction with adaptive cruise control. Those

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cars in 2019 would be very few in that crash sample, right?

A I don't know because the manufacturers won't give that data out, so it's impossible to tell.

Q But that data is -- I'm talking about the data in the NHTSA study.

A I know. It's impossible to know, it's impossible to know. You would have to be able to know each of the model years of each car in that crash dataset and then you would have to know whether or not the ADAS system was engaged at the time or whether it was even bought to be on the car as an option so it's impossible to know.

Q But it's going to be a very small percentage in 2019 of vehicles equipped --

A This is a red herring.

Q Let me finish.

A You're right.

MR. EVERSOLE: Let him repeat his question he's asking for.

BY MR. SMITH:



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Q It's going to be a very small percentage of the vehicles represented in NHTSA's fatality study in 2000 -- of 2019 vehicles, I mean, sorry, 2019 crashes, that have technology that is like what we've been talking about with lane centering and adaptive cruise control. Because there just weren't that many.

MR. EVERSOLE: Object to the form.

That's not correct. That's not correct. Α This was one of the reasons I was hired to work at We cannot say from this dataset. NHTSA. need to know are the proportion of people who were driving with this technology and then be able to compare that with the proportion of the people who were killed with this technology. That is the only way that you can answer that question. know it is possible that that number is smaller. It is also possible that that number's larger. It is possible that proportionally people with the technologies were being killed more than people not with the technologies, we simply don't have the data to know that.

BY MR. SMITH:

Q All right. And that really wasn't my question. And probably my fault for not being articulate enough about it. The data here is for all crashes and all fatalities in 2019, correct?

A That is correct for the data that they have, but it's not, it is definitely not all fatalities that happened in this country.

Q Okay. And I'm not asking for a proportionality to compare ADAS versus non-ADAS or autopilot versus non-autopilot. What I'm driving at is because there are so many, I mean, sorry, so few vehicles in 2019, that had a lane centering plus adaptive cruise control technology, we just looked at five, the total of all crashes in the United States in 2019 total of all fatalities, is not, there's going to be a very low percentage within that total of vehicles that have these systems. And were operating, right?

A That's not correct.

MR. EVERSOLE: Objection to the form.

Asked and answered twice.



BY MR. SMITH: 1 I'm sorry if you answered it, I 2 Okav. didn't think you did the first time. But if, if 3 that's your answer, we'll live with that. Back on the issue of allowance for 5 use in, outside of an ODD and alerting the driver 6 that the car is no longer in the ODD, are those 7 items discussed in the SAE quideline a recommended practice for automated vehicles? I don't believe that they are in the 10 version that was in 2018. 11 Well, here's one in June, in June of 2018. 12 And let's -- that's yours. So this vehicle is a 13 Level 2, right, this Model 3, 2018 is a Level 2 14 15 system, right? By the SAE's definition it is. 16 Is that what you call it? 17 No. 18 19 What do you call it? Q I don't use the levels. 20 You don't use them at all? 21 0



I try not to.

Α

Q	I	thought	you	called	them	L2	plus	or
somethir	ıg?							

A Well, you know, this is, I probably did in 2020, but this has become an increasing problem, is the SAE levels, they've actually changed since we had that last deposition and it's very confusing.

Q Okay. But in terms of L2 plus, you're really not supposed to be use fractional -- according to the guideline, you're not supposed to use fractional --

A That's correct. That's why I updated my language, Joel. So I try just to stick with lateral and longitudinal control so that people don't get confused with the AED and other safety features in ADAS.

Q So let's talk about, let's go to page 21.

Actually, go to 22. And let's look at Level 4

there. And what we're looking at is a chart and

that chart has the conditions from Level 3

automation and Level 4 automation, right?

A Um-hum.

Q And Level 3's called Conditional Driving



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Automation, Level 4 is called High Driving, High
Driving Automation, right? Correct?

A Yes.

Q All right. You know, I know you know this and I know I'm reading it, but somebody might be reading this and sometimes he is not looking at the page. That's why I'm doing this.

A Um-hum.

Q It may seem a little laborious. And then on the column in the middle is what the driver's role is and the column on the right is the role of the driving automation system, right?

A Agree.

Q All right. So in the column on the right Level 4, says that the role of the driving automation system in Level 4 is to permit engagement only within an ODD, for Level 4, right?

A Agree.

Q And then on Level 3 it says the same thing for the role of the driving automation is to permit engagement only within the ODD, right?

A That's correct.



Q So the driver is not involved in selecting where the system can operate, the ODD does, I mean the automated system does that, for three and four?

A Yes.

Q All right. And then for Level 2, we come back over to page 21, and there is no statement for the role of driving automation in selecting an ODD on the right column but the third bullet on the left column, role of the user, it says, determines whether and when engagement and disengagement of driver automation system is appropriate, right?

A Yes, that's what the SAE 20 -- 3016 says.

Q So with respect to what the SAE recommended practice is, the Level 2 vehicle that was being driven by Mr. Banner under this SAE J3016 does not require the ODD engagement only within, I mean the engagement only within ODD limits being set by the driver automation system under this system, right?

MR. EVERSOLE: Form.

A So it is arguable whether or not these standards apply to a car that's in beta.



1	BY MR. SMITH:
2	Q Okay. All right. I'm asking you about
3	what this
4	A I agree that the SAE recommended practices
5	apply to cars with deployed software, with
6	operational software.
7	Q Your, your requirement for restricted ODD
8	in a vehicle that's not Level 3 or 4 is different
9	than the SJ
LO	A When you say my requirement, if only I
Ll	were
12	Q Your opinion that it is required, let's
L3	say that.
L4	A Particularly for test vehicles and
L5	vehicles under beta, yes.
L6	Q Okay. The driver monitoring system is a
L7	countermeasure for misuse and abuse, would you agree
18	with that?
19	MR. EVERSOLE: Form.
20	A I'm sorry.
21	BY MR. SMITH:
22	Q Is a driver monitoring system a



1	countermeasure for abuse and misuse?
2	MR. EVERSOLE: Form.
3	A Of?
4	BY MR. SMITH:
5	Q Of the automated technology in a vehicle?
6	A I believe the driver monitoring systems
7	are to help keep the driver engaged.
8	Q Are they a countermeasure for misuse and
9	abuse?
10	A You could phrase it that way.
11	Q Okay. And doesn't the recommended
12	practice phrase it that way, the SAE J3016? Do you
13	recall that?
14	A What page?
15	Q I'm on page 13. Note one under 3.09.1,
16	monitor the user, note one says, user monitoring is
17	the context of driving automation, I'm sorry, let me
18	read that again. User monitoring in the context of
19	driver automation is most likely to be deployed as a
20	countermeasure for misuse or abuse, including
21	overreliance due to complacency, or driver
22	automation eyetems other driver automation eyetem



but may also serve other purposes. So are they 1 countermeasures for misuse and abuse under J30.6 2 (sic)? 3 Under J3016, yes. Α 4 And one of those misuses and abuses that 5 0 it refers to is overreliance due to complacency? 6 7 Α Yes, that's what it says. Okay. 8 Q Can we take a little break 9 MR. SMITH: 10 now? THE VIDEOGRAPHER: All right. Going off 11 The time is 1:34. 12 the record. there was a break from 13 (Whereupon, 1:34 p.m. until 1:39 p.m.) 14 (Whereupon, Exhibit No. 13 was marked for 15 identification.) 16 THE VIDEOGRAPHER: Going back on the 17 record. The time is 1:39. 18 BY MR. SMITH: 19 So while we were off we marked the service 20 21 vehicle recommended practice, J3016 SAE, June, 2018, as Exhibit 13. Which was the document we were 22



referring to.

A Okay.

Q The opinion that you have under human fail safe intentional misconduct, Tesla says AP, the driver assistant Level 2 system which requires driver to be ready to take immediate action, but they allow drivers to take hands off wheel for 30 seconds or more.

A That's correct.

Q That's fine. In your earlier deposition you said that that should be triggered not at 30 seconds but at two seconds. Is that still your view?

A I think that if you're going to tell somebody that they have to keep their hands on the wheel, they should not be allowed to take their hands off the wheel for really any length of time.

Q So when should the warning occur? When should the alert happen?

A I would say you can look at the window from, I still, two would be the floor, and then seven, eight seconds later.



1	Q And are you aware of any vehicle that has				
2	that cruise control and lane-centering technology				
3	that operate together that has a two- to				
4	eight-seconds window?				
5	A No.				
6	Q Okay. You know, you know the answer				
7	before I ask the question.				
8	A It's actually, it's my third rail because				
9	I do agree that none of them have it and it's a				
10	problem.				
11	Q Okay. Thank you. But you also have as an				
12	opinion under gross negligence human fail safe,				
13	fourth bullet point.				
14	A Um-hum.				
15	Q Denial that misuse because of potential				
16	hazard, right?				
17	A Yes.				
18	Q And you believe that Tesla has denied that				
19	misuse is a potential hazard?				
20	A Well, I believe that a company that has				
21	one accident where a human is killed with a truck				

under run in 2016, then refuses to do anything,

including updating the neural nets, conducting more 1 testing, even trying to change warnings in their 2 owner's manuals, yes, I would, I think that 3 constitutes an implicit denial that there is a 4 5 problem. Implicit denial with trucks, 6 0 7 problem with trucks in cross traffic or a denial of Just trying to understand what you're 8 misuse? 9 sayinq. I think it's both. 10 Tesla included in its technology a 11 12 system of user monitoring that is a countermeasure for abuse and misuse, 13 right? 14 MR. EVERSOLE: Objection to form. 15 I would say that it has a very poor 16 countermeasure. BY MR. SMITH: 17 I understand you were going to say 18 Okav. that, but what I'm saying is you say they've denied 19 20 it but they've actually put a technology in their

vehicle that is a countermeasure part.

MR. EVERSOLE:



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Objection, asked and

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answered.

A I think having your CEO go on "60 Minutes" and show that you can go hands-free and then orchestrating a fake video to show that the car can drive by itself for extended periods of time is a denial of misuse.

BY MR. SMITH:

Q Okay. I'm, we'll address with other people whether that's a correct statement, but what I'm asking you is, isn't there a countermeasure in the vehicle for misuse?

MR. EVERSOLE: Object, asked and answered three times.

A There is a very poor countermeasure in the vehicle.

BY MR. SMITH:

Q And aren't there warnings and instructions in the owner's manual about --

A I'm sorry.

Q About abuse and misuse?

A There are very poor and confusing messages inside the owner's manual.



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MR. EVERSOLE: Object to the form.

BY MR. SMITH:

Q And isn't there a pop-up agreement the

Q And isn't there a pop-up agreement the first time you use the vehicle that addresses misuse?

A I agree there is a pop-up, whether or not it effectively corrects misuse would be answered by the fact that you've had so many fatalities.

Q I didn't say corrects, I mean, I don't think anybody changes human nature by what they tell people to do, so don't get me wrong, but what I'm saying is there is, rather than denying it, it's addressed by a countermeasure, addressed in the owner's manual, addressed in the agreement, addressed every time someone turns on the autopilot, the issue of misuse is being addressed with an instruction to keep your hands on the wheel and your eyes on the road, right?

MR. EVERSOLE: Object to the form.

A The fact that Teslas keep hitting first responder vehicles and hitting vehicles broad side would be an illustration that your mitigations are



1 | not effective.

BY MR. SMITH:

Q Okay. I'm going to move strike that because I didn't ask about effective mitigation, I didn't ask anything about crashes and it's totally unresponsive. That's not being rude, it's just putting an objection on the record that I think is valid. But, so what I'm asking you is this. Rather than denying it altogether, which is what you're saying, isn't it true that they've addressed it with a countermeasure, they've addressed it with warnings in the owner's manual, they've addressed it with a pre-use agreement on the, on the screen, and they address it every time you turn it on?

MR. EVERSOLE: Same objection to form, asked and answered.

17 BY MR. SMITH:

Q Isn't it true?

A I would agree that all the lists of supposed interventions that you just listed, they were there before Jeremy Banner died and they are still there after Jeremy Banner died and nothing has



changed, they did not change after the Williston accident, so if Tesla were a serious company about owner safety, I think if they would have done more to address what continues to be a very serious problem.

Q Well, let's get to that because two of your opinions on your chart deal with that. If I can find mine. One is reliance, they're both on the technology section on intentional misconduct, the second and third bullets both deal with that issue, correct?

A Yep.

Q And what I wanted to ask you about that was what vehicles in 2018 both detect for and control for a crossing tractor-trailer?

A Just in general what technologies are available to do this?

Q No, no. What vehicle in the world and what model year vehicle in 2018 had a system that would detect a tractor-trailer in crossing traffic at 60, 70 miles an hour, and with control for it, meaning that it would prevent or mitigate the crash



1	forces?				
2	MR. EVERSOLE: Objection.				
3	A When you say it would prevent or mitigate,				
4	what exactly do you mean?				
5	BY MR. SMITH:				
6	Q Well, either stop the vehicle or slow it				
7	down?				
8	A I'm not aware of another car that was				
9	actively able to do this in a deployed status. It				
10	is a problem with radar in general.				
11	Q And crossing traffic is a challenge for				
12	radar?				
13	A That is correct.				
14	Q And are you aware of a vehicle				
15	manufactured today that would both, on the road				
16	that, that would both detect and control the vehicle				
17	in a situation where the crossing traffic of a				
18	tractor-trailer?				
19	A Based on radar?				
20	Q Based on anything.				
21	A There are companies today working on the				
22	ability to use other sensors to detect crossing				



traffic, so yes.Q You sai

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Q You said there are companies working on the --

A And doing it.

Q Well, I'm asking you what vehicle that I can go buy has that capability in 2023?

A Cars with LiDAR are increasingly having this capability and there are cars with LiDAR on the road.

Q So cars with LiDAR actually will do this?

A They can detect cars that they are about to collide with in a closer distance.

Q So what model and model year would have detected this crash, and not just detect it, but would have controlled the vehicle, because those are two separate things?

A Well, that's what I'm trying to say. Are we talking about 2018 or 2023?

Y Q Well, 2018 you've already given me an answer. I'm talking about today. Is there now technology on the road, today, in commercially available passenger cars that I can go buy and



drive, that will both detect and control for the situation that Mr. Brown or, or Mr. Banner encountered?

A I've not, I'm not aware of anybody who's conducted that test, but in theory cars with some capabilities could be able to do that. In theory, AEB and/or LiDAR together should help mitigate that.

Q All right. But you can't give me a vehicle?

A I had, I don't know of one that's been in a test to show that with a crossing truck, a semi tractor-trailer.

Q Okay. One of the things you say is that in your chart is that Tesla didn't, it was not in keeping with known standards. So it says, gross negligence, human fail safe, not in keeping with known standards. I'm trying to understand what that means.

A For that one there is, your auditory cuing inside the vehicle is very subpar, it's very hard to hear the alerts or that the alerts come in, so I think it's very hard for people to, and there are



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very clear standards about how to present oral cues
with visual warnings.

Q Okay. And what are those standards, where do I find those?

A Go to the Internet and type in human factor standards and you can get them from the FAA, you can get them from the Department of Defense, you can get them from ISO.

- Q Okay. So which ones are you relying on?
- 10 A Pick them. Pick one.
 - Q Well, I don't to get pick them, you do.
 - A Okay. I mean, I would point to all of them because they're all, they all clearly point out the need to use a dual coding in alerts.
 - Q All right. And what, what specifically do the standards say that Tesla did not do? Is that the right way to ask that?
 - A Yeah. The oral cueing for when you're engaging autopilot, I'm sorry, when it's disengaging, is not very loud, I have to go back and I'm trying to remember exactly what I was meaning in this bullet, but I'll have to get back to you on



1 that.

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Q Yeah. And listen, I don't want to do another deposition.

A Um-hum.

Q But it is important if this is one of your opinions.

A Yeah.

Q So if you don't mind just checking with John on this?

A Yeah, I mean, we can, you know, the thing is I might want to go back and consult, you know, I'm trying to remember what exactly I, I meant by that.

Q Fair. I don't want to, I don't want to over complicate things but I don't want to string out another deposition and if we do another deposition, it will be just limited to this point.

MR. EVERSOLE: I will provide that if that's good enough for you.

MR. SMITH: Well, you know, I might want to ask her a question or two. So we can, we can Zoom it and make it work, but that's,



that's really all I want to --

A That's the thing, is what I, I want to say that's why I want to, like, this may be and I was look at the rest of the, the limits here, but I'll consult with you, let me, before we go down that path.

BY MR. EVERSOLE:

Q And if it is what you're thinking here that oral cuing is not within a standard when autopilot disengages, does that really have any --

A Yeah, exactly. That's --

Q Wait, wait, wait, I got to get the whole question out. Does the, does that really have anything to do with the Banner case?

A Yes. That's why -- it occurred to me.

I'm like, wait a minute, I think that's not what I meant in this particular case.

Q I see. But as we sit here, we just don't remember what that means?

A No. But I need to go back and look at how I did this part.

Q There are a lot of people on the phone who



1	probably want me to call and consult with them
2	before I say I don't have any further questions. So
3	if y'all want to take a break?
·4	A Yes. Let's take a break.
5 ·	Q I don't think I have any more questions.
6	THE VIDEOGRAPHER: All right. Going off
7 .	the record. The time is 1:56.
8	(Whereupon, there was a break from
9	1:56 p.m. until 2:04 p.m.)
10	THE VIDEOGRAPHER: Back on the record.
11	The time is 2:04.
12	BY MR. SMITH:
13	Q Okay. I stepped out of the room and you
14	guys had a chance to talk about what the answer was
15	to, not in keeping with known standards and what did
16	y'all come up with?
17	MR. EVERSOLE: I didn't talk about it.
18	A. So in that bullet I was specifically
19	talking about ISO hazard analysis standards. So
20	throughout all the documentation that I saw, it was
21	pretty shocking that the poor quality of the hazard

analyses that were performed and then across a



1 myriad of depositions that people didn't even know 2 that standardized processes existed for hazard analysis and risk management. 3 What is that ISO standard? What number? 0 4 I can actually look it up for you. 5 Α You don't remember the number? 6 0 It's a very long, 14971, but there's a 7 Α bunch that are associated with that. 8 9 Q Okay. Okay. 10 Α It's not just one standard. 11 0 Any other standards? No, specifically I was talking about the 12 Α assessment, the hazard assessment standards. 13 Then that's all the questions I Okay. 14 Q 15 have. EXAMINATION BY COUNSEL FOR PLAINTIFF 16 17 BY MR. EVERSOLE: I have a few questions, Dr. Cummings, and 18 19 first, I'd like to ask you, what is a standing 20 general order? What is that, what is the definition 21 of that?

So the standing general order is a



1	requirement by the government for companies to
2	report crashes that do occur when any kind of
3	autonomy is engaged.
4	Q And you reviewed the standing general
5	orders on these crashes as well being Tesla
6	vehicles?
7	A Yes, but they're all subsequent to they
8	didn't start, the recording didn't start until 2021.
9	Q And is Tesla, are Tesla crashes involved
10	in that, in that data, for Tesla crashes when the
11	cars are on automation, auto steer or auto drive
12	known?
13	A Yes. By there's two databases, one is
14	to automated driving system, self-driving, cruise.
15	There's another one for ADAS systems and Tesla is,
16	far and away, has the most accidents in this
17	database.
18	Q What would you guess a percentage of Tesla
19	crashes, do you have any idea?
20	MR. SMITH: Objection, speculation.
21	A They update it every month, it's no

speculation, you can goes -- anyone. But it changes



monthly but I would say it typically is around 80 to 1 2 90 percent. BY MR. EVERSOLE: 3 I'm going to mark Dr. Cummings' CV as 4 5 Plaintiff's Exhibit A. (Whereupon, Exhibit A was marked for 6 identification.) 7 BY MR. EVERSOLE: 8 Do you have it with you there, Doctor? 9 I gave them both. 10 You can use that one. Here it is. 11 12 mark one if that's okay. Let's go through a little You received an appointment to the naval 13 bit. academy, correct? 14 I did. 1.5 Α And when did you graduate from the naval 16 17 academy? 1988. 18 And you became a carrier pilot at that 19 time? 20 Well, I became an adversary pilot in the A 21 Α force and then subsequent to that I flew F18s. 22



1	Q An A4, that was the plane that was in Top				
2	Gun"?				
3	A That is Top Gun one.				
4	Q Top Gun one. Did you I assume you did				
5	carrier landings?				
6	A I have done carrier landings.				
7	Q When did you get out of the Navy?				
8	A I left the Navy in 1999.				
9	Q Okay. And I see on your CV naval				
10	postgraduate school. Is that in Monterey,				
11	California, is that the one?				
12	A Yes.				
13	Q And what did you study and what degree did				
14	you get from the naval postgraduate school?				
15	A I got a master's degree in aeronautical				
16	engineering.				
17	Q And then what was the next, I see the				
18	University of Virginia is on here. When did you go				
19	to UVA?				
20	A I went to UVA from 2001 to 2004.				
21	Q And what degree did you receive, Doctor?				
22	A I got my Ph.D. in systems engineering.				



Q Can you define for us what a systems engineering is to the -- in case there's ever a jury, what is systems engineering?

A Systems engineering is the study of how

A Systems engineering is the study of how systems are built, designed, tested and then operated.

MR. SMITH: Just one thing. I want to object because this doesn't seem like an update, it seems like historical and everything here was talked about in her, her original deposition. And I don't care if you do it, but if you are going to suggest that it's improper, you shouldn't do it yourself.

MR. EVERSOLE: Well, is this an updated CV?

A It is an updated CV.

MR. EVERSOLE: So I'm going to be complete. I want to go through the updated part as well as the original part.

MR. SMITH: Well, I think you're kind of meeting yourself coming around the mountain on that, but I'm not, I'm not sure how you can



object to what I did and then turn around and 1 do same thing, which is exactly what you're 2 doing. 3 Go ahead. 4 BY MR. EVERSOLE: 5 Doctor, after you received your degree 6 from the University of Virginia, what was your next 7 position you held and where did you go? 8 I was professor at MIT for ten years. 9 Α And what positions did you hold at MIT? 10 Professor of aeronautical and aero and 11 astro engineering. 12 And before, before MIT you had, you had 13 0 held other positions at other universities as well? 14 I had been a professor at Virginia Tech 15 Α for a brief period. 16 And Penn State? 17 That was in the military, but yes. 18 And then at some point you, you went to 19 Became a professor at Duke University? 20 Yes, I was a professor there for nine 21 Α



years.

Q And generally tell me, tell us what you
as a professor what fields you worked in and what
fields you taught in and researched in while at
Duke.

- A During my entire career both at MIT and Duke, I studied autonomous systems, and specifically human interaction and autonomous systems.
- Q And is that the foundation of your testimony, part of your testimony against Tesla in this case?
 - A Yes, it is.
- Q Now, going through your resume, CV we call it, you had, you have 124, I believe, there's probably more now, publications that you authored or co-authored; is that correct?
 - A It's over 200.
- Q Over 200 now. Okay. Can you point out to us, let's say three or four specific articles, and you can use your -- to remember all these -- that directly relate to your testimony in this case regarding the autopilot and the autonomous system, ADAS, and so forth, in the Tesla vehicles?



MR. SMITH: Are you talking about since 1 her last deposition or is this --2 MR. EVERSOLE: 3 No. MR. SMITH: I'm just --Just in case she's not 5 MR. EVERSOLE: available at trial. 6 MR. SMITH: Ahh, just in case she's not 7 8 available at trial. And I'm just, so I'm not 9 10 Some of them are after the MR. EVERSOLE: deposition. Some papers are after the 11 12 deposition. Sø I can't do a 13 MR. SMITH: cross-examination just because she might not be 14 available at trial but you can do a direct 15 16 examination just because she might not be 17 available at trial? Isn't that -- you're not 18 feeding me out of the same spoon. You're 19 making objections and telling me not to ask 20 questions and then you are going around, 21 turning around and doing exactly the same



thing.

1	MR. EVERSOLE: It's not the same at all.
2	It's apples and oranges.
3	MR. SMITH: You said in case she can't
4	come to trial. I can ask cross-examination
5	questions now, right, just because she might
6	not be at trial?
7	MR. EVERSOLE: No, I'm just going to put
8	this is on the record, it wasn't on the record
9	the first time.
10	MR. SMITH: It's the same thing, it's
11	exactly the same thing and you're just
12	violating your own mandates.
13	BY MR. EVERSOLE:
14	Q Go ahead, Doctor. Can you point out two
15	or four or two or three?
16	A Yeah, I'll point out three that I think
17	are relevant. Number 68 in the first grouping of
18	papers called Rethinking Maturity of Artificial
19	Intelligence and Safety Critical Settings.
20	Q Um-hum.
21	A The second one
22	Q Well, maybe, 68, can you say that in



2.

English for us? What does that mean in --

A It basically explains why artificial intelligence in Teslas and other similar cars is struggling to be better than it is.

Q And what's the second article that you can point out to us?

A The second article will be Safety

Implications of Variability and Autonomous Driving

Assist Performance, number 74.

Q Seventy-four. And again, would you explain that in a language that I can understand, anyway?

A This is a paper that we used in Teslas, we conducted hundreds of tests on Teslas in various capacities. Not specifically to highlight problems with Teslas, but to look at the performance of computer vision systems in an applied setting. And then the last one is one that was recently added, it is under the page 21, number four under C, journals or articles currently under review, this one's called Unreliable Pedestrian Detection and Driver Alerting and Advanced Driver Systems, where we again

took Teslas but there's another car in there too,
and so we took these cars out to determine how well
they performed in pedestrian detection and
avoidance.

Q And the Banner case does not involve a pedestrian. How does that -- does that relate to the, your work in the Banner vehicle, Banner case?

A It loosely. We did not do the test because of the Banner case, these tests were planned long before that, before I got involved with you. But these tests also revealed problems with the predictability of the computer vision system which directly relates them to the Banner case.

Q Is there anything else that, is there another article that is, the recent article that would relate to the Banner case other than the one that's still being, I guess, approved, I guess you call it?

A I mean, none of them, none of them relate directly in the sense that we never tested trucks, car's visibility to detect crossing trucks.

Q But the science and technology relates



directly to the Banner case. 1 Yes. Α 2 That's all I have. That's it. 3 0 I might have one more. 4 MR. SMITH: Do I leave this here as part of the 5 Α MR. EVERSOLE: I'm going to have it 6 7 attached to the deposition. Why don't you just make it the MR. SMITH: 8 9 next exhibit? MR. EVERSOLE: Well, I'm going to do A 10 because it's a plaintiff's exhibit. 11 Do you want all of these back? 12 Α MR. SMITH: I'm going to get squared away 13 here in just a second. I'll give you 14 Oh, I have a question. Madam 15 everything. court reporter, we still on the record? 16 THE COURT REPORTER: Yes, we are. I'm on 17 mute. 18 EXAMINATION BY COUNSEL FOR DEFENDANTS TESLA, INC., 19 20 d/b/a TESLA FLORIDA, INC. 21 BY MR. SMITH: Just a couple of quick questions about 22 Q



I'm noticing a file that was an articles your file. 1 length that it was very helpful to get those 2 articles, and I think one of the items on there was 3 the Chris Moore deposition in the Wong case with all 4 the exhibits. Is that right? 5 6 Α That's correct. Have you signed the protective order 7 Wong? 8 I did. We hadn't gotten those today. 10 Were you supposed to send this out? 11 MR. EVERSOLE: I think so. 12 Okay. MR. SMITH: 13 MR. EVERSOLE: I think they were involved 14 You don't have them, you're saying, 15 in that. the Chris Morris' depo and the Wine (phonetic) 16 case? 17 MR. SMITH: I do have Chris Morris' depo 18 and the Wine case. 19 20 MR. EVERSOLE: You don't have the 21 protective orders, is that what you're saying?



MR. SMITH:

22

I was surprised to see that

she had it in her file, not that -- but because
I didn't have notice that she, that it had been
shared with her.

A I actually helped with the Wine case
before I went to NHTSA, so.

BY MR. SMITH:

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Q Okay. Okay. So you, you have that from the Wine case?

A Yes.

Q Oh, okay, okay. Now I understand. But you signed that, correct?

A Yes.

Q Okay. Thank you. That clears up my misunderstanding. I think I'm done. That was my only extra.

THE VIDEOGRAPHER: And if there's nothing else, then I'll take us off the record. That concludes today's deposition. The time is 2:18.

MR. EVERSOLE: Madam court reporter, we're going to read, please.

MR. SMITH: The one thing I want to say,



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we've got a stack of exhibits here, and can I
 1
     give these to you and let you give them to the
 2
     reporter?
 3
          THE VIDEOGRAPHER: I don't, I don't
 4
     typically do that, usually the reporter's here
 5
     but I'm sure, I'm sure we can work that out.
 6
 7
          (Whereupon, there were discussions off
     record.)
 8
          MR. GALVIN: We want the mini, the maxi,
 9
     the full depo and we want the video synced.
10
          MR. SMITH: Did you get that, madam court
11
     reporter?
12
          THE COURT REPORTER:
                                Yes.
13
          MR. SMITH:
                      Thank you.
                                   That's for Tesla.
14
          THE COURT REPORTER:
                                Okay.
15
          MR. EVERSOLE: We're ordering for the
16
     plaintiff as well, a copy.
17
           (Signature having not been waived, the
18
     deposition of DR. MARY CUMMINGS concluded at
19
20
     2:19 p.m.)
21
22
```



ACKNOWLEDGEMENT OF DEPONENT

I, DR. MARY CUMMINGS, do hereby acknowledge I have read and examined the foregoing pages of testimony, and the same is a true, correct and complete transcription of the testimony given by me, and any changes or corrections, if any, appear in

DATE DR. MARY CUMMINGS

the attached errata sheet signed by me.



CERTIFICATE OF NOTARY PUBLIC

certify that the witness whose testimony appears in

the foregoing deposition was duly sworn by me in

stenotype and thereafter reduced to typewriting

under my direction; that said deposition is a true

record of the testimony given by said witness; that

I am neither counsel for, related to, nor employed

by any of the parties to the action in which this

deposition was taken; and further, that I am not a

employed by the parties hereto, nor financially or

otherwise interested in the outcome of this action.

Shen (Steve

SHERI C. STEWART, RMR

Notary Public in and for the

COMMONWEALTH OF VIRGINIA

relative or employee of any counsel or attorney

the foregoing deposition was taken, do hereby

I, SHERI C. STEWART, the officer before whom

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My commission expires: June 30, 2024

22 | Notary Registration No. 346630



1	Reference No.: 9551921				
2					
3	Case: KIM BANNER vs TESLA				
4					
5	DECLARATION UNDER PENALTY OF PERJURY				
6	I declare under penalty of perjury that I have read the entire transcript of my Depo-				
7	sition taken in the captioned matter or the same has been read to me, and the same is				
8	true and accurate, save and except for changes and/or corrections, if any, as indi-				
9	cated by me on the DEPOSITION ERRATA SHEET hereof, with the understanding that I offer				
10	these changes as if still under oath.				
11					
12	Dr. Mary Cummings				
13					
14	NOTARIZATION OF CHANGES				
15	(If Required)				
16					
17	Subscribed and sworn to on the day of				
18					
19	, 20 before me,				
20					
21	(Notary Sign)				
22					
23	(Print Name) Notary Public,				
24					
25	in and for the State of				



1 2	Reference No.: 9551921 Case: KIM BANNER vs TESLA
3	Page NoLine NoChange to:
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TEELR

Model 3 Motor Vehicle Order Agreement

Vehicle Configuration

Customer		Description	. Price (USD)
Jeremy Banner		Model 3	\$35,000
(561) 714-4538		Not including the \$7,500 Federal Tax Credit	
jbanner99@hotmail.com		Long Range All-Wheel Drive Performance	\$29,000
Order Number	RN109231700	Red Multi-Coat Paint	\$2,500
Order payment	\$2,500	Performance Upgrade	Included
Order placed with electronically accepted	12/9/2018	20" Performance Wheels	Included
terms		Performance Brakes). Included
Price indicated does not include taxes and governmental fees, which will be calculated as your delivery date nears. You will be responsible for these additional taxes and fees.		Carbon Fiber Spoiler	Included
		Performance Pedals	Included
		Black and White Premium Interior	\$1,000
		Enhanced Autopilot	\$5,000
		Subtotal	\$72,500
		Destination and Documentation Fee	\$1,200
		1972 - Programme and the second line is a second line of the second line is a second line in the second line is a second line	

EXHIBIT "M"



Motor Vehicle Purchase Agreement Terms & Conditions

Documentation. Your Model 3 Motor Vehicle Order Agreement (the "Agreement") is made up of the following documents:

- 1. <u>Vehicle Configuration:</u> The Vehicle Configuration describes the vehicle that you configured and ordered, including pricing (excluding taxes and official or government fees).
- 2. <u>Final Price Sheet:</u> The Final Price Sheet will be provided to you as your delivery date nears. It will include final pricing based on your final Vehicle Configuration and will include taxes and official or governmental fees.
- 3. <u>Terms & Conditions</u>: These Terms & Conditions are effective as of the date you place your order and make your Order Payment (the "Order Date").

Agreement to Purchase. You agree to purchase the vehicle (the "Vehicle") described in your Vehicle Configuration from Tesla, Inc. or its affiliate ("we," "us" or "our"), pursuant to the terms and conditions of this Agreement. Your Vehicle is priced and configured based on features and options available at the time of order and you can confirm availability with a Tesla representative. Options, features or hardware released after you place your order may not be included in or available for your Vehicle.

Purchase Price, Taxes and Official Fees. The purchase price of the Vehicle is indicated in your Vehicle Configuration. This purchase price does not include taxes and official or government fees, which could amount to up to 10% or more of the Vehicle purchase price. Because these taxes and fees are constantly changing and will depend on many fectors, such as where you register the Vehicle, they will be calculated closer to the time of delivery and indicated on your Final Price Sheet. You are responsible for paying these additional taxes and fees. If you present a check for any payment, we may process the payment as a normal check transaction, or we may use information from your check to make a one-time electronic fund transfer from your account, in which case your bank account will reflect this transaction as an Electronic Fund Transfer.

Order; Nonrefundable Order Payment; Changes. After you submit your completed order and the options you selected become available in production, we will begin the process of matching your order to a vehicle and coordinating your Vehicle delivery. Your Order Payment covers the cost of these activities and other processing costs and is not a deposit for the Vehicle. Your Order Payment is fully refundable only until your order is matched to a Vehicle, at which point it becomes nonrefundable. Any changes to your Vehicle Configuration, delivery location or expected delivery time after the Order Date will be difficult, if not impossible, for us to accommodate. If you want to make changes to your order, we will try to accommodate your request. If we accept your request, you may be subject to a non-refundable \$500 change fee and potential price increases for any pricing adjustments made since your original Order Date. Any changes made by you to your Vehicle Configuration, including changes to the delivery location or estimated delivery date, will be reflected in a subsequent Vehicle Configuration that will form part of this Agreement.

Cancellation; Default: We incur significant costs in managing your order, and locating and coordinating delivery logistics for your Vehicle. We may also incur significant costs for remarketing and reselling the Vehicle, including additional coordination, logistics and transport costs. If you cancel or default in this Agreement after your order is matched to a Vehicle, you will not be refunded your Order Payment as it has already been earned by us in taking and processing your order and preparing your Vehicle for delivery. You acknowledge that the Order Payment amount is a fair and reasonable estimate of the actual damages that we have incurred or may incur as a result of your breach of this Agreement, damages that are otherwise impracticable or extremely difficult to determine. When you take delivery of the vehicle we will provide a credit to the final purchase price of your Vehicle equivalent to the amount of the Order Payment you paid. This Order Payment and this Agreement are not made or entered into in anticipation of or pending any conditional sale contract.

Delivery. If you are picking up your Vehicle in a state where we are licensed to sell the Vehicle, we will notify you of when we expect your Vehicle to be ready for delivery at your local Tesla Delivery Center, or other location as we may agree to. You agree to schedule and take delivery of your Vehicle within one week of this date. If you are unable to take delivery within the specified period, your Vehicle may be made available for sale to other customers.

If you wish to pick up your Vehicle in a state where we are not licensed to sell the Vehicle, or if you and Tesla otherwise agree, Tesla will, on your behalf, coordinate the shipment of your Vehicle to you from our factory in California or another state where we are licensed to sell the Vehicle. In such a case, you agree that this is a shipment contract under which Tesla will coordinate the shipping of the Vehicle to you via a third-party common carrier. You agree that delivery of the Vehicle, including the transfer of title and risk of loss to you, will occur at the time your Vehicle is loaded onto the common carrier's transport (i.e., FOB shipping point). The carrier will insure your Vehicle in transit and you will be the beneficiary of any claims for damage to the Vehicle or losses occurring while the Vehicle is in the possession of a common carrier.

The estimated delivery date of your Vehicle, if provided, is only an estimate as we do not guarantee when your Vehicle will actually be delivered. Your actual delivery date is dependent on many factors, including your Vehicle's configuration and manufacturing availability. To secure your final payment and performance under the terms of this Agreement, we will retain a security interest in the Vehicle and all proceeds therefrom until your obligations have been fulfilled.

Privacy Policy; Payment Terms for Services; Supercharger Fair Use Policy. Tesla's Customer Privacy Policy; Payment Terms for Services and Supercharger Fair Use Policy are incorporated into this Agreement and can be viewed at www.tesla.com/about/legal.



Agreement to Arbitrate. Please carefully read this provision, which applies to any dispute between you and Tesla, Inc. and its affiliates. (together "Tesla").

If you have a concern or dispute, please send a written notice describing it and your desired resolution to resolutions@tesla.com.

If not resolved within 60 days, you agree that any dispute arising out of or relating to any aspect of the relationship between you and Tesla will not be decided by a judge or jury but instead by a single arbitrator in an arbitration administered by the American Arbitration Association (AAA) under its Consumer Arbitration Rules. This includes claims arising before this Agreement, such as claims related to statements about our products.

We will pay all AAA fees for any arbitration, which will be held in the city or county of your residence. To learn more about the Rules and how to begin an arbitration, you may call any AAA office or go to www.adr.org.

The arbitrator may only resolve disputes between you and Tesla, and may not consolidate claims without the consent of all parties. The arbitrator cannot hear class or representative claims or requests for relief on behalf of others purchasing or leasing Tesla vehicles. In other words, you and Tesla may bring claims against the other only in your or its individual capacity and not as a plaintiff or class member in any class or representative action. If a court or arbitrator decides that any part of this agreement to arbitrate cannot be enforced as to a particular claim for relief or remedy, then that claim or remedy (and only that claim or remedy) must be brought in court and any other claims must be arbitrated.

If you prefer, you may instead take an individual dispute to small claims court.

You may opt out of arbitration within 30 days after signing this Agreement by sending a letter to: Tesla, Inc.; P.O. Box 15430; Fremont, CA 94539-7970, stating your name, Vehicle Identification Number, and intent to opt out of the arbitration provision. If you do not opt out, this agreement to arbitrate overrides any different arbitration agreement between us, including any arbitration agreement in a lease or finance contract.

Warranty. You will receive the Tesla New Vehicle Limited Warranty or the Tesla Preowned Limited Warranty, as applicable, at or prior to the time of Vehicle delivery or pickup. You may also obtain a written copy of your warranty from us upon request or from our website.

Limitation of Liability. We are not liable for any incidental, special or consequential damages arising out of this Agreement. Your sole and exclusive remedy under this Agreement will be limited to reimbursement of your Order Payment.

No Resellers; Discontinuation; Cancellation. Tesla and its affiliates sell cars directly to end-consumers, and we may unilaterally cancel any order that we believe has been made with a view toward resale of the Vehicle or that has otherwise been made in bad faith. We may also cancel your order and refund your Order Payment if we discontinue a product, feature or option after the time you place your order or if we determine that you are acting in bad faith.

Governing Law; Integration; Assignment. The terms of this Agreement are governed by, and to be interpreted according to, the laws of the State in which we are licensed to sell motor vehicles that is nearest to your address indicated on your Vehicle Configuration. Prior agreements, oral statements, negotiations, communications or representations about the Vehicle sold under this Agreement are superseded by this Agreement. Terms relating to the purchase not expressly contained herein are not binding. We may assign this Agreement at our discretion to one of our affiliated entities.

State Specific Provisions. You acknowledge that you have read and understand the provisions applicable to you in the State-Specific Provisions attachment to this Agreement.

This Agreement is entered into and effective as of the date you accept this Agreement, by electronic means or otherwise. By confirming and accepting this Agreement, you agree to the terms and conditions of this Agreement.



State Specific Provisions

For **NEW YORK** residents: If the Vehicle is not delivered in accordance with the Agreement within 30 days following the estimated delivery date, you have the right to cancel the Agreement and receive a full refund, unless the delay in delivery is attributable to you.

For MASSACHUSETTS residents: ATTENTION PURCHASER: All vehicles are WARRANTED as a matter of state law. They must be fit to be driven safely on the roads and must remain in good running condition for a reasonable period of time. If you have significant problems with the Vehicle or if it will not pass a Massachusetts inspection, you should notify us immediately. We may be required to fix the car or refund your money. THIS WARRANTY IS IN ADDITION TO ANY OTHER WARRANTY GIVEN BY US.

For WASHINGTON, D.C. residents:

NOTICE TO PURCHASER

IF, AFTER A REASONABLE NUMBER OF ATTEMPTS, THE MANUFACTURER, ITS AGENT, OR AUTHORIZED DEALER IS UNABLE TO REPAIR OR CORRECT ANY NON-CONFORMITY, DEFECT, OR CONDITION WHICH RESULTS IN SIGNIFICANT IMPAIRMENT OF THE MOTOR VEHICLE, THE MANUFACTURER, AT THE OPTION OF THE CONSUMER, SHALL REPLACE THE MOTOR VEHICLE WITH A COMPARABLE MOTOR VEHICLE, OR ACCEPT RETURN OF THE MOTOR VEHICLE FROM THE CONSUMER AND REFUND TO THE CONSUMER THE FULL PURCHASE PRICE, INCLUDING ALL SALES TAX, LICENSE FEES, REGISTRATION FEES, AND ANY SIMILAR GOVERNMENT CHARGES. IF YOU HAVE ANY QUESTIONS CONCERNING YOUR RIGHTS, YOU MAY CONTACT THE DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS.

Seller certifies that the information contained in the itemization of the purchase price, including the Vehicle Configuration, and required by Chapter 3 (Buying, Selling and Financing Motor Vehicles) of Title 16 of the Code of D.C. Municipal Regulations, is true to the best of