UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF VIRGINIA ALEXANDRIA DIVISION

THE BOEING COMPANY and AURORA FLIGHT SCIENCES CORPORATION, A BOEING COMPANY,

Plaintiffs,

ν.

VIRGIN GALACTIC, LLC,

Defendant.

Civil Action No. 24-cv-00456

COMPLAINT JURY TRIAL DEMANDED

Plaintiffs The Boeing Company ("Boeing") and Aurora Flight Sciences Corporation, a Boeing Company ("Aurora"), by and through their undersigned attorneys, allege as follows:

INTRODUCTION

- 1. This case is about a space tourism company's misappropriation of trade secrets in order to advance and expedite its own engineering development efforts—and save its bottom line—while refusing to pay the more than \$25 million it owes for work already performed.
- 2. Defendant Virgin Galactic, LLC ("Virgin Galactic") is the commercial human spaceflight business founded by billionaire Richard Branson in 2004.
- 3. Virgin Galactic offers space tourists suborbital flights aboard its Virgin Space Ship *Unity*, a rocket-powered crewed spaceplane. Instead of launching from a ground base like other government and commercial programs, Virgin Galactic launches *Unity* to suborbital space from another airplane—a jet carrier known as Virgin Mothership *Eve*—at an altitude of approximately 44,000 feet.
- 4. Although *Eve* was unveiled in 2008, a series of setbacks delayed Virgin Galactic's first crewed spaceflight aboard *Unity* to July 2021 and its first commercial flight to 2023.

- 5. Even before Virgin Galactic's first crewed flight, concerns about reliability and profitability drove it to pursue a replacement for *Eve*.
- 6. In 2021, Virgin Galactic solicited information from potential suppliers about developing, fabricating, and testing a new fleet of Motherships. Virgin Galactic sought to develop its new Mothership in order to fix known structural issues with *Eve* and deliver improved operability and reliability.
- 7. With improved reliability, Virgin Galactic also hoped to realize profitability. According to Virgin Galactic's public statements, each *Unity* flight, launched from *Eve*, earns between \$1.8 and \$2.4 million in revenue. But Virgin Galactic has to date flown *Unity* and *Eve* at only a monthly cadence, limiting its profitability and long-term viability.
- 8. Virgin Galactic needed, and still needs, to increase revenue—and quickly. Virgin Galactic envisioned a new Mothership that could fly multiple flights per day, day after day—up to 200 flights per year in total for up to five years. And Virgin Galactic wanted its new Mothership in the air as soon as possible—by early 2024 at the latest.
- 9. In February 2022, Virgin Galactic contracted with Aurora, a wholly owned Boeing subsidiary, to provide engineering services in order to begin designing a new Mothership while the parties finished negotiating a Master Agreement to govern the rest of the development and production process.
- 10. The Master Agreement, executed in July 2022, provided for Aurora to perform work as specified in individual task orders. The parties negotiated and executed two such agreements, Task Order 1 and Task Order 2.1 (together, the "Task Orders"). The Task Orders compensate Aurora on a time-and-materials basis.

- 11. Aurora performed all of its obligations under the Task Orders. For example, it completed a preliminary design review that presented the design status of the aircraft in February 2023. And in May 2023, Aurora completed an Integrated Baseline Review setting out the next steps and schedule required to complete design and execution. Based on the work done under these Task Orders, Aurora concluded that the new Mothership Virgin Galactic wanted would cost more and take longer to develop than Virgin Galactic had hoped given its critical need for a new Mothership to increase cash flow.
- 12. Virgin Galactic did not deliver on its contractual obligations. It has refused to pay Aurora more than \$25 million for work Aurora performed under the parties' Task Orders.
- 13. Worse, Virgin Galactic has misappropriated at least two key sets of Boeing's and Aurora's trade secrets—proprietary equations (more formally, formulations, parameters, and variables) and test data. Those trade secrets are exactly the kind of information Virgin Galactic could use to advance design of a new Mothership on its own or with a different supplier. And Virgin Galactic maintains that it is working on just such a project—a new Mothership to be released no later than 2027. Virgin Galactic has meanwhile refused to destroy documents reflecting those trade secrets, in breach of the proprietary information provisions of the Master Agreement.
- 14. Boeing and Aurora thus bring this suit to recover their property rights in their trade secrets, damages resulting from misappropriation, and the more than \$25 million Virgin Galactic has refused to pay in breach of the parties' agreements.

JURISDICTION AND VENUE

15. This Court has subject-matter jurisdiction under 28 U.S.C. § 1331 because plaintiffs' claims arise under the Defend Trade Secrets Act, 18 U.S.C. § 1836 et seq.

- 16. Aurora provided its services to Virgin Galactic in interstate and foreign commerce. In particular, Virgin Galactic is headquartered in Tustin, California. Its flights aboard *Eve* launch from Sierra County, New Mexico; it expects to launch flights aboard its new Mothership from that same location. Aurora is headquartered in Manassas, Virginia. Aurora employees performed its contractual obligations from that location and others.
- 17. Boeing, Aurora, and Virgin Galactic engage in interstate and international competition for their services. Boeing and Aurora use the trade secrets in dispute in this case in conducting interstate competition and in the course of their national and international business operations.
- 18. This Court has supplemental subject-matter jurisdiction under 28 U.S.C. § 1367 over plaintiffs' remaining state-law claims because they are so related to plaintiffs' claims arising under the Defend Trade Secrets Act as to form part of the same case or controversy.
- 19. This Court has personal jurisdiction over Virgin Galactic because Virgin Galactic purposefully availed itself of the privilege of conducting business in Virginia and because plaintiffs' claims arise out of and relate to Virgin Galactic's activities directed at Virginia.
- 20. Those activities far exceed the minimum contacts required for this Court to exercise personal jurisdiction. Virgin Galactic solicited business from Aurora in Virginia; negotiated the contracts at issue in part in Virginia; performed work under the contracts through its employees in Virginia, who were embedded at Aurora's facilities in Virginia for months under a contractual provision requiring such "colocation"; monitored Aurora's performance through those same employees, located in Virginia; and failed to deliver payment to Aurora in Virginia.
- 21. In particular, Aurora and Virgin Galactic held more than a dozen important meetings in Virginia. Among others, those include a meeting to assess Aurora's capabilities for

undertaking work on the new Mothership, attended by a Virgin Galactic Vice President and other leaders; a meeting to negotiate terms of the Engineering Services Agreement, attended by Virgin Galactic's President, one of its Vice Presidents, and a Senior Director; a meeting to negotiate terms of the Master Agreement, attended by another Vice President; and a meeting to negotiate the terms of Task Order 2.1, attended by a Virgin Galactic Senior Vice President and two other Vice Presidents. The parties also held multiple contractually required meetings in Virginia, including the Conceptual Design Review, attended by a Virgin Galactic Vice President, Director, and others; a Preliminary Design Review, attended by Virgin Galactic's Senior Vice President and multiple Vice Presidents; and multiple recurring weekly and monthly program updates attended by several Virgin Galactic employees.

- 22. The Master Agreement specifically requires that Aurora provide for a reasonable number of Virgin Galactic employees to perform work at Aurora facilities. Master Agreement § 9. Consistent with this provision, Virgin Galactic employees in fact did perform work on the contract while located at Aurora's facilities in Manassas, Virginia, to allow those employees to collaborate effectively with their counterparts at Aurora. Aurora provided work space for a number of Virgin Galactic employees designated by Virgin Galactic to perform work at Aurora's Virginia facilities over the course of at least six months. The Master Agreement provided for this co-location to allow those employees to monitor contractual progress and collaborate with Aurora employees in Virginia in performing Virgin Galactic's obligations at issue in this dispute.
- 23. Venue is proper in this District because a substantial part of the events or omissions giving rise to the claim occurred in this District. *See* 28 U.S.C. § 1391(b)(2).

PARTIES

- 24. Plaintiff The Boeing Company is a Delaware corporation with its principal place of business located at 929 Long Bridge Drive, Arlington, Virginia 22202.
- 25. Plaintiff Aurora Flight Sciences Corporation, a Boeing Company, is a Delaware corporation with its principal place of business located at 9950 Wakeman Drive, Manassas, Virginia 20110.
- 26. Defendant Virgin Galactic, LLC is a Delaware corporation with its principal place of business located at 1700 Flight Way, Tustin, California 92782.

STATEMENT OF FACTS

I. Virgin Galactic's Space Program and New Mothership

27. Virgin Galactic unveiled *Eve* in 2008. *Eve*, shown below both alone and carrying *Unity*, is a custom-built, four-engine, dual fuselage jet carrier originally intended to be a "demonstrator" aircraft. *Eve* was designed and built by Scaled Composites, an aerospace company focused on designing concept aircraft and fabricating prototypes. Because *Eve* is made of lightweight carbon composite materials and has a distinctive duel-fuselage structure, she can reach high altitudes with heavy payloads in ways traditionally made aircraft cannot.





28. This distinctive structure and its intended use—to carry and launch another aircraft into the upper atmosphere with human beings aboard—also present unique aerodynamic and engineering challenges.

- 29. After unveiling *Eve*, Virgin Galactic encountered a series of operational and safety setbacks, including the crash of its Virgin Space Ship *Enterprise*—the first suborbital rocket-powered spaceplane it sought to launch from *Eve*—during a powered test flight in 2014.
- 30. The company took its first fully crewed flight aboard *Unity*, with Branson aboard, in July 2021. In June 2023, *Unity* completed its first commercial spaceflight; it has since taken six more commercial flights.
- 31. The significant maintenance and downtime *Eve* requires between flights to ensure safety and proper function limits the cadence of Virgin Galactic's flight schedule.
- 32. *Unity* and *Eve* together generate between \$1.8 and \$2.4 million in revenue per flight—and thus, roughly, per month.¹
- 33. That revenue proposition is unsustainable. In just the third quarter of 2023, Virgin Galactic suffered a net loss of \$105 million against its total value (measured in cash, cash equivalents, and marketable securities) of \$1.1 billion.² It projected that loss to increase to more than \$125 million in the fourth quarter.³
- 34. In an effort to slow these losses, Virgin Galactic plans to ground *Unity* in mid-2024 and instead to devote resources to its next-generation suborbital vehicle, *Delta*.⁴
- 35. Virgin Galactic sees a path to profitability in its forthcoming fleet of *Delta* spaceplanes, each of which it projects to fly eight times per month.⁵ But it recognizes that this

¹ Virgin Galactic Holdings, Inc. Q3 2023 Earnings Presentation (Nov. 8, 2023) at 8, available at https://tinyurl.com/VGQ32023Earnings.

² *Id.* at 12.

³ *Id.* at 18.

⁴ *Id.* at 10.

⁵ *Id.* at 8.

flight plan will require a new Mothership to replace *Eve*, which Virgin Galactic now plans to unveil in 2027, according to its most recent public disclosures.⁶

- 36. Virgin Galactic has long known that it would need to replace *Eve* in order to reduce the substantial maintenance required between flights to ensure reliable operability. Indeed, it began to pursue development of a new Mothership even before *Unity* completed its first commercial flight.
- 37. In April 2021, Virgin Galactic solicited information from potential suppliers about developing, fabricating, and testing a new fleet of Motherships.
- 38. Virgin Galactic wanted the new Mothership to remedy *Eve*'s known structural issues in order to reduce the maintenance required for safety and operability, improve weight and balance, and increase payload capabilities.
- 39. Virgin Galactic's revenue predicament and *Eve*'s downtime requirements made speed a chief driver of the new Mothership program. Virgin Galactic wanted the first new Mothership to be ready by early 2024 at the latest, with additional aircraft in the series to follow.
- 40. As further alleged below, Aurora concluded based on its rigorous engineering work that Virgin Galactic's aspirational timeline for developing a new Mothership was unrealistic. Little engineering support for *Eve*'s original design was available, multiplying the effort required to produce a new Mothership similar to *Eve* with sufficient engineering and design support to ensure

⁶ *Id.* at 10; *see* Virgin Galactic Holdings, Inc. Q3 2023 Earnings Call Transcript (Nov. 8, 2023), *available at* https://tinyurl.com/VGQ3EarningsTranscript; *see also* Virgin Galactic Holdings, Inc. Q4 2023 Earnings Call Transcript (Feb. 27, 2024), *available at* https://tinyurl.com/VGQ4EarningsTranscript ("[W]e do expect to bring on additional growth capital to fund the assets needed, primarily additional spaceships and motherships to expand our business at an appropriate rate.").

safety and reliable operability. Virgin Galactic's budget constraints made its ambitious timeline even more unrealistic.

- 41. This was not the answer Virgin Galactic wanted to hear. The parties have not undertaken further work together on the Mothership program.
- 42. Virgin Galactic has now publicly acknowledged that it expects a new Mothership to enter service in early 2027—three years from now, which is three years later than its initial goal.⁷
- 43. Aurora, however, has not performed any work on Virgin Galactic's new Mothership since the conclusion of Task Order 2.1 in May 2023. And in the course of performing its work under the Task Orders, Aurora concluded that it would not be possible for Virgin Galactic to produce the new Mothership Virgin Galactic wanted, on the budget available to it, on the timeline Virgin Galactic hoped to meet. Virgin Galactic cannot now achieve that goal without a running head start from the work Aurora has already performed, including trade secrets Virgin Galactic refuses to destroy.

II. The Parties' Relationship and Agreements

A. The Master Agreement

44. Aurora and Virgin Galactic first discussed potential plans for a new Mothership in early 2021. After an initial exchange of information, they entered into an Engineering Services Agreement in early 2022. That agreement provided for Aurora to begin engineering work to support the design of a new Mothership while the parties continued to negotiate the Master Agreement that would govern their relationship for the duration of the Mothership program.

⁷ Virgin Galactic Holdings, Inc. Q3 2023 Earnings Presentation (Nov. 8, 2023) at 8, 10, available at https://tinyurl.com/VGQ32023Earnings.

- 45. In July 2022, the parties entered into a Master Agreement to govern their efforts to develop a new Mothership.
- 46. The Master Agreement provides for Aurora to perform the work set forth in multiple serial Task Orders, themselves individually negotiated and executed. *See* Master Agreement § 2.A. Each Task Order includes a Statement of Work that specifies what deliverables Aurora will provide to Virgin Galactic and when it will provide them. *Id*.
- 47. The Master Agreement also addresses the handling of proprietary information and other intellectual property the parties would exchange or develop in connection with the Mothership program.
- 48. Under the Master Agreement, Virgin Galactic owns all rights to "Foreground Intellectual Property," defined as intellectual property "first developed, conceived, or generated" for the benefit of a party to the Master Agreement. Master Agreement § 7.B & Ex. A at 39 ¶ 24.
- 49. The Master Agreement defines all other intellectual property, and any derivative works thereof, as "Background Intellectual Property." Master Agreement Ex. A at $37 \, \P \, 9$.
- 50. The Master Agreement specifically defines "AFS Background IP" as "any Background Intellectual Property owned by either [Aurora] or one of its Affiliates that is either incorporated into a Deliverable or that is necessary for [Virgin Galactic] to exploit its rights in the Foreground Intellectual Property." Master Agreement Ex. A at 37 ¶ 4. It further requires Aurora to "identify AFS Background IP" and grant one of two categories of licenses "for purposes of exploiting [Virgin Galactic's] rights in the Deliverables and the Foreground Intellectual Property, such license for use with [Virgin Galactic's] mothership carrier aircraft development and operation." Master Agreement § 7.C.1.

- 51. A "Category 1" Background Intellectual Property license permits Virgin Galactic to, among other things, *make and have made*—by third parties—the licensed Background Intellectual Property. *See id*.
- 52. A "Category 2" Background Intellectual Property license permits Virgin Galactic merely a license, among other things, *to make and otherwise use—i.e.*, not to share with third parties—the licensed Background Intellectual Property. *See id*.
- 53. In all cases, licenses are granted only for Background Intellectual Property "listed in Exhibit E" to the Master Agreement. *Id.* The date of license is deemed "made as of the date of notation within Exhibit E." *Id.*
- 54. Background Intellectual Property not identified as AFS Background IP subject to a Category 1 or Category 2 license remains exclusively "Proprietary Information." *Id.* § 8.A.
- 55. The Master Agreement specifically addresses disagreements about the categorization of Background Intellectual Property. In particular, it provides that "[a]ny disagreement between the Parties as to the categorization of Background Intellectual Property shall be resolved by mutual agreement of the Parties' Program Directors. If the Parties are unable to reach agreement as to the categorization," the Master Agreement directs Aurora to "provide Foreground Intellectual Property in lieu of the disputed Background Intellectual Property in accordance with Paragraph C of Article 23 (Changes)." *Id.* § 7.C.2.
- 56. Paragraph C of Article 23 (Changes) of the Master Agreement in turn provides for an equitable adjustment by mutual agreement to any Statement of Work or Target Price in the event a change to contractual terms "causes an increase or decrease in the cost of, or the time required for" a task. *Id.* § 23.C.

- 57. In other words, the Master Agreement specifies the exclusive contractual remedy for any disagreement about the categorization of intellectual property: Aurora shall provide Foreground Intellectual Property instead of handing over its own Background Intellectual Property, but only after the parties have reached mutual agreement about how much Virgin Galactic will pay Aurora to do that work and other terms and conditions.
- 58. The Master Agreement also provides for the robust protection of Proprietary Information. In particular, it requires a party in receipt of Proprietary Information to "promptly return, or otherwise destroy, Proprietary Information as the Disclosing Party may direct." Master Agreement § 8.F.
- 59. In addition, the Master Agreement provides that, "[w]ithout obtaining the owning party's written consent, the other party shall make no further use, either directly or indirectly for any third parties, of any data or any information derived from any Proprietary Information." Master Agreement § 8.H.
- 60. The Master Agreement requires the parties to "attempt to settle any dispute arising out of this Agreement amicably through conciliation" but permits either party to seek remedy in a court of competent jurisdiction after unsuccessful good faith attempts. Master Agreement § 26.C.
- 61. The Master Agreement is governed by the laws of Delaware, without regard to any conflicts of law rules. Master Agreement § 26.A.

B. Task Orders 1 and 2.1

- 62. Aurora performed work according to two Task Orders executed under the Master Agreement.
- 63. Task Order 1 was executed July 4, 2022, the same day as the Master Agreement. Its Statement of Work covered completion of a Concept Design Review, an Integrated Baseline

Review, a Tooling Procurement Readiness Review, and a Preliminary Design Review for the overall aircraft design. Task Order 1 specifically identified the "program deliverables" covered by its Statement of Work. In addition to these design reviews, the Statement of Work for Task Order 1 required Aurora to provide weekly status reports, monthly program management reviews and integrated program management reports, and quarterly program reviews. *See* Task Order 1 at 23.

- 64. Task Order 1 was a time and materials contract, meaning that Aurora's charges were based on hourly-rate labor and non-labor costs it incurred. Task Order 1, as initially awarded, specified a "Not To Exceed" amount of \$42,954,999.00 for those charges.
 - 65. Aurora performed its obligations under Task Order 1.
- 66. Between August 2022 and May 2023, Aurora submitted invoices in the cumulative amount of \$42,769,999.00 for work performed under Task Order 1.
 - 67. Aurora's invoices totaled less than the "Not To Exceed" amount for Task Order 1.
- 68. Under the Master Agreement, Virgin Galactic owed Aurora payment within 45 days from the date Aurora submitted each invoice. *See* Master Agreement § 4.A.
- 69. Virgin Galactic has paid Aurora \$33,545,941.38 for work performed under Task Order 1. The balance of \$9,224,057.61 has not been paid and is more than 120 calendar days past due.
- 70. Aurora and Virgin Galactic executed Task Order 2.1 on January 27, 2023. Its Statement of Work focused on additional developmental design tasks in support of the design of the new Mothership. Again, Task Order 2.1 included a specific list of contractual deliverables for Aurora to provide. *See* Task Order 2.1 at 9.

- 71. Like Task Order 1, Task Order 2.1 was a time and materials contract, meaning that Aurora's charges were based on hourly-rate labor and non-labor costs it incurred. Task Order 2.1 specified a "Not To Exceed" amount of \$18,946,324.00 for those charges.
 - 72. Aurora performed its obligations under Task Order 2.1.
- 73. Between May and September 2023, Aurora submitted invoices in the cumulative amount of \$17,170,270.23 for work performed under Task Order 2.1—less than the specified "Not To Exceed" amount. Virgin Galactic has paid Aurora nothing for the work Aurora performed under this Task Order.

III. The Parties' Dispute

A. Outstanding Invoices

- 74. After work on Task Order 2.1 concluded in May 2023, Aurora and Virgin Galactic exchanged correspondence concerning certain of Aurora's outstanding invoices. Where requested, Aurora provided additional information, consistent with the Master Agreement, to provide Virgin Galactic "the level of visibility for VG to manage the Task Order." Master Agreement § 4.A.4.
- 75. On August 30, 2023, Aurora wrote Virgin Galactic to express its "grave concern" that Virgin Galactic had still failed to pay more than \$25 million in invoices submitted for work Aurora performed under Task Orders 1 and 2.1.
 - 76. Virgin Galactic still has not paid Aurora the outstanding invoiced amounts.
- 77. Aurora sought to resolve this matter, in accordance with the Master Agreement's Disputes provision, through multiple exchanges of correspondence and an in-person meeting with Virgin Galactic. The parties have been unable to resolve the dispute.

B. Proprietary Equations

78. Meanwhile, Virgin Galactic has also refused to destroy three important pieces of intellectual property as the Master Agreement requires.

- 79. First, near the end of its course of performance, Aurora inadvertently disclosed to Virgin Galactic two documents containing certain proprietary information—specifically, formulations, parameters, and variables (together, "equations") relating to flight control and aircraft surface stability. They are reflected on a handful of particular pages of two specific PowerPoint files.
- 80. At the close of Task Order 2.1, Aurora provided contract Deliverables and supporting material to Virgin Galactic through a SharePoint site. Two particular files, "Math Model Plan RevA.pptx" and "Math Model Plan RevA1.pptx," were inadvertently disclosed to Virgin Galactic when they were included in error in the set of materials uploaded to the SharePoint site.
- 81. Specific pages in each of these files reflect proprietary equations. In particular, the equations appear on slides 12, 14, and 15 of the document entitled "Math Model Plan Rev A1.pptx." The equations also appear on slide 14 of the document entitled "Math Model Plan Rev A.pptx."
- 82. For example, the equations enclosed in a box marked on slide 12 of the document entitled "Math Model Plan Rev A1.pptx" are proprietary. The equations include both certain particular parameters and information about the way those parameters relate to each other. These equations allow Boeing and Aurora to understand and model the way an airframe responds to various forces. For instance, the equations convey information that allows Boeing and Aurora to model with great precision an aircraft's angle of attack. The identification of certain parameters as relevant to the angle of attack is itself Boeing proprietary. And the information the equations convey about the relationship between those parameters, among others, is also Boeing proprietary.

Boeing has identified and developed these parameters, and the relationships between and among them, over the course of its long aircraft development history.

- 83. To take another example, the equations enclosed on slide 14 of the same document are similarly proprietary. For example, they convey the way Boeing uses a hinge moment function in a proprietary manner to model the airframe's reaction to force. "Hinge moment" refers to the torque applied to control surfaces (such as the elevator or rudder) by air load.
- 84. These equations are trade secrets. Boeing has developed and refined these equations over the course of years. It has invested significant financial and other resources in doing so.
- 85. These equations allow Boeing and Aurora to model aircraft stability and control with exceptional accuracy beyond that which is commonly available in the aerospace industry.
- 86. Boeing and Aurora take extensive measures to protect the secrecy of these equations, including by marking them as proprietary, storing them on secure servers and systems, and limiting distribution and access to prevent unauthorized disclosure or access. In particular, Boeing and Aurora do not grant access to these equations outside Boeing or Aurora without conducting a formal process involving multiple layers of approval from stakeholders across different business sectors. Any such access provided to third parties, which is rare, is subject to licensing terms and provisions ensuring the continued confidentiality of the equations.
- 87. These equations are valuable to Boeing and Aurora because they give it a distinct competitive advantage in accurately modeling aircraft stability and control. This knowledge also allows, among other things, faster development of aircraft models and aircraft design.
- 88. These equations were not licensed to Virgin Galactic through the process set out in the Master Agreement, nor does Virgin Galactic have any right to possess or use them. Instead, they remain Proprietary Information under the Master Agreement.

- 89. Within weeks of the inadvertent disclosure, Aurora informed Virgin Galactic that it had disclosed the equations in error and directed Virgin Galactic to destroy the two documents—"Math Model Plan Rev A.pptx" and "Math Model Plan Rev A1.pptx"—that include those equations.
- 90. The Master Agreement requires a party in receipt of Proprietary Information to "promptly return, or otherwise destroy, Proprietary Information as the Disclosing Party may direct." Master Agreement § 8.F.
- 91. Virgin Galactic has refused to destroy the documents containing these equations on Aurora's demand, as the Master Agreement requires. Virgin Galactic insists that it is entitled—notwithstanding the provision of the Master Agreement governing disputes concerning intellectual property categorizations—to a Category 1 Background Intellectual Property License in these equations. In other words, Virgin Galactic maintains that it has the right not only to use these equations itself but also to provide them to competitors of Boeing and Aurora in order to allow them to develop a new Mothership using Boeing and Aurora's trade secrets.

C. Proprietary Test Data

- 92. Virgin Galactic has also refused to destroy a document reflecting trade secret test data belonging to Boeing and Aurora.
- 93. Aurora proposed to use as the material for the new Mothership's structure a composite material sold commercially as "IM7/8552." This selection leveraged Boeing's and Aurora's extensive knowledge library to eliminate other composites as potential candidates for use as the Mothership's structural material. In particular, Aurora relied on Boeing's extensive knowledge of what are known in aerospace engineering as "material allowables"—the

characteristics of composite materials that allow them to withstand certain forces or give them other properties.

- 94. Aurora granted Virgin Galactic a Category 2 Background Intellectual Property License in two specific documents relating to Aurora's "material allowables" recommendation for the new Virgin Galactic Mothership.
- 95. Before the conclusion of Task Order 2.1, Aurora also provided to Virgin Galactic certain proprietary test data reflected in a third document—a single Adobe .pdf file named "AR21-262-Rev-" (the "262 Document"). Aurora specifically explained to Virgin Galactic that the 262 Document contained Proprietary Information to which Aurora was not offering any license rights. Instead, Aurora explained, it provided the document, subject to the Proprietary Information clauses of the Master Agreement, for purposes of allowing Virgin Galactic to assess what data would be available in the event the parties wished to pursue a future license agreement.
- 96. The 262 Document reflects the results of thousands of tests Boeing and its contractual partners conducted—over long periods of time and at great expense—to determine material properties of the composite in question, IM7/8552. The 262 Document shows *how* Boeing and Aurora know that the composite material in question will perform as Boeing and Aurora say it will under various conditions (for example, at different temperatures and levels of moisture).
- 97. The data reflected in the 262 Document are very valuable to Boeing and Aurora. For example, these data can alert engineers to a design or composite processing discrepancy earlier in the development process than the issue might emerge absent the data. Early discovery of such discrepancies can save time and money and help avoid manufacturing variances and in-service maintenance actions or repairs once an aircraft has been produced. The data also enhance Boeing's

and Aurora's ability to disposition in-service repairs by providing information about a material's tolerance for heat, force, and impact damage.

- 98. Importantly, the data reflected in the 262 Document are not necessary to exploit any contractual Deliverable. Nor are they necessary to exploit the two documents relating to Aurora's "material allowables" recommendation in which Aurora granted Virgin Galactic Category 2 Background Intellectual Property licenses. Those two documents themselves demonstrate that Boeing and Aurora understand that the proposed composite material will perform as required. In other words, Virgin Galactic could itself construct a new Mothership with a structure made of the carbon composite Aurora recommended—or hire another supplier to do so—without ever consulting the trade secret test data reflected in the 262 Document.
- 99. Aurora provided the 262 Document to Virgin Galactic as Proprietary Information, not subject to any license, in order to enable Virgin Galactic to assess what data would be available in the event the parties wished to pursue a future license agreement. Virgin Galactic thus has no contractual right or need to use the data for this purpose.
- 100. Boeing and Aurora take extensive measures to protect the secrecy of this test data, including by marking it as proprietary, storing it on secure servers and systems, and limiting distribution and access to prevent unauthorized disclosure or access. In particular, Boeing and Aurora do not grant access to this test data outside Boeing without conducting a formal process involving multiple layers of approval from stakeholders across different business sectors. Any such third-party access, which is rare, is subject to licensing terms and provision for the continued confidentiality of the data.
- 101. Again, Aurora disclosed the 262 Document to Virgin Galactic expressly as Proprietary Information only, not as Background or Foreground Intellectual Property, and not

subject to any license. Upon acquiring the 262 Document from Aurora, Virgin Galactic did not object or dispute that it was Proprietary Information only, implicitly accepting Aurora's conditions for disclosure.

- 102. But months later, after Aurora instructed Virgin Galactic to destroy the 262 Document pursuant to Aurora's contractual right to direct such destruction, see Master Agreement § 8.F, Virgin Galactic refused to do so and still retains possession of the document it acquired as Aurora Proprietary Information.
- 103. Worse still, Virgin Galactic now insists that it is entitled—notwithstanding the provision of the Master Agreement governing disputes concerning intellectual property classifications—to a Category 1 Background Intellectual Property License in the data reflected in the 262 Document. In other words, Virgin Galactic maintains that it is presently entitled not only to use the 262 Document itself, but also to provide it to competitors of Boeing and Aurora in order to allow *them* to develop a new Mothership using Boeing and Aurora's trade secrets.
- 104. The parties' efforts to resolve these disputes, including through counsel, have not been fruitful. Aurora therefore brings this suit to recover the more than \$25 million Virgin Galactic owes it under the Task Orders and to remedy Virgin Galactic's misappropriation of its trade secrets.

CLAIMS FOR RELIEF

Count I Breach of Contract

- 105. Plaintiffs reallege and incorporate by reference the allegations contained in the preceding paragraphs as though set forth fully herein.
- 106. In the Master Agreement and Task Orders 1 and 2.1, Virgin Galactic undertook an obligation to pay Aurora for the work Aurora performed under Task Orders 1 and 2.1.

- 107. Aurora has performed its obligations under the Master Agreement and Task Orders 1 and 2.1.
- 108. Virgin Galactic has breached its payment obligations in the Master Agreement and Task Orders 1 and 2.1 by refusing to pay more than \$25 million in Aurora's invoices, causing direct financial harm to Aurora.

Count II Breach of Contract

- 109. Plaintiffs reallege and incorporate by reference the allegations contained in the preceding paragraphs as though set forth fully herein.
- 110. In the Master Agreement, Virgin Galactic undertook an obligation to resolve disputed characterizations of Background Intellectual Property that the Parties could not reach agreement on through the Master Agreement's Changes Clause.
- 111. In unilaterally claiming Category 1 licenses to "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document, Virgin Galactic has breached its obligations and harmed Boeing and Aurora.
- 112. In the Master Agreement, Virgin Galactic undertook an obligation to "promptly return, or otherwise destroy" Proprietary Information on Aurora's instructions and make no further use of the information. Master Agreement §§ 8.F, 8.H.
- 113. Virgin Galactic has breached the Master Agreement by refusing to destroy "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," the 262 Document, and, on information and belief, all information derived therefrom, on Aurora's instructions.

Count III Misappropriation of Trade Secrets Defend Trade Secrets Act, 18 U.S.C. § 1836 et seq.

- 114. Plaintiffs reallege and incorporate by reference the allegations contained in the preceding paragraphs as though set forth fully herein.
- 115. Plaintiffs own trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document.
- 116. Plaintiffs have taken significant measures to maintain the secrecy of the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document.
- 117. The trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document are intended for use in interstate and foreign commerce as part of Boeing's and Aurora's business.
- 118. The trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document are valuable to Boeing and Aurora and derive value from not being generally known.
- 119. Virgin Galactic acquired the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document by improper means because it has refused to destroy them on Aurora's demand, as the Master Agreement requires.
- 120. Virgin Galactic acquired the trade secret data reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document under circumstances giving rise to a duty to maintain their secrecy and limit their use.

- 121. At all relevant times, Virgin Galactic had an obligation to maintain the secrecy of and limit any use of the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document.
- 122. On information and belief, Virgin Galactic has used or disclosed, or will use or disclose, the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document in its bid to develop a new Mothership by 2027.
- 123. Virgin Galactic's use or disclosure of the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document has harmed and will continue to harm Boeing and Aurora because it deprives them of the economic and competitive value of that intellectual property.
- 124. Virgin Galactic's misappropriation of the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document is willful and malicious.

Count IV Misappropriation of Trade Secrets Delaware Uniform Trade Secrets Act, 6 Del C. § 2001 et seq.

- 125. Plaintiffs reallege and incorporate by reference the allegations contained in the preceding paragraphs as though set forth fully herein.
- 126. Plaintiffs own trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document.
- 127. Plaintiffs have taken significant measures to maintain the secrecy of the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document.

- 128. The trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document are valuable to Boeing and Aurora and derive value from not being generally known.
- 129. Virgin Galactic acquired the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document by improper means because it has refused to destroy them on Aurora's demand, including as the Master Agreement requires.
- 130. Virgin Galactic acquired the trade secret data reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document under circumstances giving rise to a duty to maintain their secrecy and limit their use.
- 131. At all relevant times, Virgin Galactic had an obligation to maintain the secrecy of and limit any use of the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document.
- 132. On information and belief, Virgin Galactic has used or disclosed, or will use or disclose, the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document in its bid to develop a new Mothership by 2027.
- 133. Virgin Galactic's use or disclosure of the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document has harmed and will continue to harm Boeing and Aurora because it deprives them of the economic and competitive value of that intellectual property.
- 134. Virgin Galactic's misappropriation of the trade secrets reflected in "Math Model Plan RevA.pptx," "Math Model Plan RevA1.pptx," and the 262 Document is willful and malicious.

PRAYER FOR RELIEF

- 135. Damages in excess of \$25 million for Virgin Galactic's breach of its contractual payment obligations;
 - 136. Preliminary and permanent injunctive relief;
 - 137. Damages for actual loss resulting from the misappropriation of trade secrets;
- 138. Damages for unjust enrichment resulting from the misappropriation of trade secrets;
- 139. The imposition of a reasonable royalty for the unauthorized disclosure or use of Boeing and Aurora's trade secrets;
- 140. Exemplary damages and attorney's fees for willful and malicious misappropriation of trade secrets;
- 141. An award of all costs and attorneys' fees pursuant to any other applicable statute or authority; and
 - 142. Any other relief this Court deems just and proper.

Dated: March 21, 2024 Respectfully submitted,

s/Brian C. Rabbitt

Stephen J. Cowen (*pro hac vice* forthcoming) Brian C. Rabbitt (Virginia State Bar #77216) Megan Lacy Owen (*pro hac vice* forthcoming) JONES DAY 51 Louisiana Avenue, N.W. Washington, D.C. 20001 Telephone: (202) 879-3939 Facsimile: (202) 626-1700

Counsel for Plaintiffs
The Boeing Company and
Aurora Flight Sciences Corporation,
a Boeing Company