Case Number: CACE-16-022001 Division: 03

Filing # 49641254 E-Filed 12/05/2016 04:47:37 PM

IN THE CIRCUIT COURT OF THE 17TH JUDICIAL CIRCUIT IN AND FOR BROWARD COUNTY, FLORIDA

CASE NO .:

ALICIA PALADIN, as Personal Representative of the Estate of MICHAEL ROSENBERG, Deceased

Plaintiff,

-VS-

EMBRAER, S.A., A Brazilian Corporation; EMBRAER AIRCRAFT HOLDING, INC., a Delaware Corporation; EMBRAER SERVICES, INC., a Delaware Corporation; EMBRAER AIRCRAFT CUSTOMER SERVICES, INC., a Florida Corporation; EMBRAER EXECUTIVE JET SERVICES, LLC, a Delaware limited liability company; EMBRAER EXECUTIVE AIRCRAFT, INC., a Delaware Corporation; EMBRAER ENGINEERING & TECHNOLOGY CENTER USA, INC., a Delaware Corporation;

| Defendants. | | | |
|-------------|--|------|--|
| | | | |
| | | | |

COMPLAINT AND JURY TRIAL DEMAND

Plaintiff, Alicia Paladin, as Personal Representative of the Estate of Michael Rosenberg, deceased, by and through the undersigned counsel, sues Defendants, Embraer, S.A.; Embraer Aircraft Holding Inc.; Embraer Services, Inc.; Embraer Aircraft Customer Services, Inc. Embraer Executive Jet Services, LLC; Embraer Executive Aircraft, Inc..; and Embraer Engineering & Technology Center USA, Inc., and alleges:

THE PLAINTIFF AND STATUTORY SURVIVORS

- 1. Plaintiff, Alicia Paladin, resides at 1805 Wiley Post Trail, Port Orange, FL. Plaintiff is the duly appointed Personal Representative of the estate of her deceased husband, Michael Rosenberg pursuant to letters of appointment issued by the Circuit Court for Volusia County, Florida, Probate Division. Both Plaintiff and her husband were citizens and residents of the State of Florida.
- Michael Rosenberg was killed in the December 8, 2014 crash of an Embraer
 Phenom 100 aircraft that occurred in Gaithersburg, MD.
- 3. Plaintiff brings this lawsuit seeking damages under the applicable Wrongful Death and Survival Acts in her capacity as the Personal Representative of the Estate of Michael Rosenberg. All potential beneficiaries of a recovery for the wrongful death of Michael Rosenberg are as follows:
 - (a) The Estate of Michael Rosenberg c/o Alicia Paladin as Personal Representative of the Estate of Michael Rosenberg;
 - (b) Alicia Paladin, the surviving spouse of Michael Rosenberg;
 - (c) Zachary Rosenberg, the surviving natural son of Michael Rosenberg;
 - (d) Caroline Rosenberg, the surviving natural daughter of Michael Rosenberg;
 - (e) Any other persons who may be entitled to recover under the applicable Wrongful Death Statute.

THE DEFENDANTS

4. Defendant Embraer S.A. ("Embraer") is a corporation organized and existing under the laws of Brazil with its "home" and principal place of business, in the United States, at 1400 General Aviation Drive, Melbourne, Florida 32901. Embraer manufactured the subject

aircraft at its manufacturing plant at Avenida Brigadeiro Faria Lima, 2170, 12227-901 São José dos Campos, São Palo, Brazil and supported the Phenom 100 through its Melbourne, Florida "home". Subsequent to the manufacture of the subject Phenom 100, Embraer relocated the manufacturing plant for these aircraft to its current location in Melbourne, Florida and now manufactures and supports the Phenom 100 aircraft through its Melbourne "home".

- 5. Indeed, in 2014 Embraer's Chief Executive Officer represented to the people and government of Florida that the State of Florida will be and is the "center of gravity" for Defendant Embraer's executive jet product, which specifically includes the subject aircraft. In addition, Defendant Embraer has referred to the State of Florida as its "North American headquarters".
- 6. Defendant Embraer created several United States corporations for purposes of supporting the Phenom 100 aircraft and other aircraft manufactured by Embraer in the United States, and to provide parts, technical support, coordination with the United States Federal Aviation Administration ("FAA"), continuing airworthiness, services to facilitate Embraer jet ownership, and guidance to pilots for the safe operation of the aircraft and maintenance professionals for the repair, overhaul and replacement of parts in that model aircraft. These entities include Embraer Aircraft Holding, Inc.; Embraer Services, Inc.; Embraer Aircraft Customer Services, Inc.; Embraer Executive Jet Services, LLC; Embraer Executive Aircraft, Inc.; and Embraer Engineering & Technology Center, USA, Inc.
- 7. At all relevant times herein, Defendant Embraer, both directly and through its Florida-based subsidiaries, designed, manufactured, assembled, inspected, tested, distributed, serviced, maintained, monitored, marketed, sold and placed into the stream of commerce and specifically within the State of Florida, the subject aircraft, as well as its component parts and

systems, including, but not limited to, the subject aircraft's ice protection systems, flight control systems, auto-pilot, and its stall warning and protection system, and their associated components, and wrote and/or approved warnings, advice, instructions and guidance for the subject aircraft, including its aircraft flight manual, aircraft operating manual, maintenance manual, maintenance and repair instructions, overhaul manual, service bulletins, inspection schedules and service life schedules, and/or performed maintenance thereon, and/or provided instruction, guidance concerning training and/or instruction with regard to the operation of the subject aircraft, including, but not limited to, with respect to flight in known icing conditions, the use of the auto-pilot and de-icing systems in known icing conditions, and upset recovery, including, but not limited to, recognizing, preventing and correcting an aerodynamic stall as well as the operation of the subject aircraft's de-icing and ice detection systems, and its stall warning and protection system and provided services that facilitated jet ownership, title transfer, and the purchase of the subject aircraft within the State of Florida.

8. Because, at all times relevant hereto, Defendant Embraer has made the State of Florida its home, and/or because Defendant Embraer engages in regularly, continuous and systematic business conduct within the State of Florida specifically with respect to the subject aircraft, including but not limited to, with respect to the design, manufacture, assembly, monitoring and/or the issuance of instructions, warnings, advice, guidance, and/or training for both the operation and/or maintenance of the subject aircraft and/or because this Defendant owns and has complete operational, financial and high and very significant control over various Florida-based subsidiary entities identified as Defendants below, and/or because this Defendant engaged in substantial and not isolated activity within this state, this Court has both general and specific jurisdiction pursuant to Fla. Stat. § 48.193.

- 9. At all times relevant herein, Defendant Embraer is a publically traded entity and as such, is required to file certain documentation with the U.S. Securities and Exchange Commission ("SEC"). In at least one such filing, Defendant Embraer irrevocably and without limitation consented and agreed to the service of "any and all legal process, summons, notices and documents in any suit, action or proceeding against" it, by service by mail of a copy thereof upon its authorized agent, namely, National Registered Agents, Inc., at 875 Avenue of the Americas, Suite 501, New York, New York 10001, provided that a copy of said suit was also mailed to Defendant Embraer by registered or certified mail, postage prepaid, to EMBRAER S.A. at Av. Brigadeiro Faria Lima, 217012227-901 Sao Jose dos Campos, Sao Paulo, Brazil, Atm: IR Department, and as such, the authorized agent is authorized to accept service of process in this matter pursuant to Section 48.091 of the Florida Statutes.
- 10. Jurisdiction over Defendant Embraer is further supported by said Defendant's own filings with the SEC, including, but not limited to, various Annual Reports, referred to as SEC Form 20-F, wherein it stated that it is the controlling and principal entity over numerous Florida-based subsidiary corporations identified as Defendants below; and that the Florida-based Defendants set forth below were included on the balance sheet of Defendant Embraer; were deemed to be "not significant subsidiaries" for purposes of separate reporting requirements under SEC rules and regulations; and moreover, Defendant Embraer represented to the public and the SEC that it had all power to direct the Florida-based subsidiary Defendants identified below with respect to the subsidiary-defendant's financial and operating policies and Defendant Embraer had, and has, exclusive control over the subsidiary-defendants' investment funds.
- 11. Defendant Embraer Aircraft Holding, Inc. is a Delaware corporation with its principal place of business at 276 Southwest 34th Street, Fort Lauderdale, Florida 33315. The

agent for service of process is Corporate Creations Network Inc., 11380 Prosperity Farms Road, Suite 221E, Palm Beach Gardens, Florida 33410.

At all times relevant herein, Defendant Embraer Aircraft Holding, Inc. was and is 12. a wholly owned subsidiary of the Defendant Embraer. The Defendant Embraer had complete control, power and authority over Defendant Embraer Aircraft Holding, Inc.'s financial and operating policies, and/or was and is the controlling and principal entity over Defendant Embraer Aircraft Holding, Inc., and either in conjunction with Defendant Embraer or on its own, Defendant Embraer Aircraft Holding, Inc. designed, manufactured, assembled, inspected, tested, distributed, serviced, maintained, monitored, marketed, sold and placed into the stream of commerce and specifically within the State of Florida, the subject aircraft, as well as its component parts and systems, including, but not limited to, the subject aircraft's ice protection systems, flight control systems, auto-pilot, and its stall warning and protection system, and their associated components, and wrote and/or approved warnings, advice, instructions and guidance for the subject aircraft, including its aircraft flight manual, aircraft operating manual, maintenance manual, maintenance and repair instructions, overhaul manual, service bulletins, inspection schedules and service life schedules, and/or performed maintenance thereon, and/or provided instruction, guidance concerning training and/or instruction with regard to the operation of the subject aircraft, including, but not limited to, with respect to flight in known icing conditions, the use of the auto-pilot and de-icing systems in known icing conditions, and upset recovery, including, but not limited to, recognizing, preventing and correcting an aerodynamic stall as well as the operation of the subject aircraft's de-icing and ice detection systems, and its stall warning and protection system and provided services that facilitated jet ownership, title transfer, and the purchase of the subject aircraft within the State of Florida.

- 13. Because this Defendant Embraer Aircraft Holding, Inc. conducted substantial and not isolated activity, and maintains its principal place of business in this state, this Court has both general and specific jurisdiction pursuant to Fla. Stat. § 48.193.
- 14. Defendant Embraer Services, Inc. is a Delaware corporation with its principal place of business at 276 Southwest 34th Street, Fort Lauderdale, Florida 33315. The agent for service of process is Corporate Creations Network Inc., 11380 Prosperity Farms Road, Suite 221E, Palm Beach Gardens, Florida 33410.
- 15. At all times relevant herein Defendant Embraer Services, Inc. was and is a wholly owned subsidiary of the Defendant Embraer. The Defendant Embraer had complete control, power and authority over Defendant Embraer Services, Inc.'s financial and operating policies, and/or was and is the controlling and principal entity over Defendant Embraer Services, Inc., and either in conjunction with Defendant Embraer or on its own, Defendant Embraer Services, Inc. designed, manufactured, assembled, inspected, tested, distributed, serviced, maintained, monitored, marketed, sold and placed into the stream of commerce and specifically within the State of Florida, the subject aircraft, as well as its component parts and systems, including, but not limited to, the subject aircraft's ice protection systems, flight control systems, auto-pilot, and its stall warning and protection system, and their associated components, and wrote and/or approved warnings, advice, instructions and guidance for the subject aircraft, including its aircraft flight manual, aircraft operating manual, maintenance manual, maintenance and repair instructions, overhaul manual, service bulletins, inspection schedules and service life schedules, and/or performed maintenance thereon, and/or provided instruction, guidance concerning training and/or instruction with regard to the operation of the subject aircraft, including, but not limited to, with respect to flight in known icing conditions, the use of the auto-pilot and de-icing

systems in known icing conditions, and upset recovery, including, but not limited to, recognizing, preventing and correcting an aerodynamic stall as well as the operation of the subject aircraft's de-icing and ice detection systems, and its stall warning and protection system and provided services that facilitated jet ownership, title transfer, and the purchase of the subject aircraft within the State of Florida.

- 16. Because this Defendant Embraer Services, Inc. conducted substantial and not isolated activity, and maintains its principal place of business in this state, this Court has both general and specific jurisdiction pursuant to Fla. Stat. § 48.193.
- 17. Defendant Embraer Aircraft Customer Services, Inc. is a Florida corporation with its principal place of business at 276 Southwest 34th Street, Fort Lauderdale, Florida 33315. The agent for service of process is Corporate Creations Network Inc., 11380 Prosperity Farms Road, Suite 221 E, Palm Beach Gardens, Florida 33410.
- 18. At all times relevant herein Defendant Embraer Aircraft Customer Services, Inc. was and is a wholly owned subsidiary of the Defendant Embraer. The Defendant Embraer had complete control, power and authority over Defendant Embraer Aircraft Customer Services, Inc.'s financial and operating policies, and/or was and is the controlling and principal entity over Defendant Embraer Aircraft Customer Services, Inc., and either in conjunction with Defendant Embraer or on its own, Defendant Embraer Aircraft Customer Services, Inc. designed, manufactured, assembled, inspected, tested, distributed, serviced, maintained, monitored, marketed, sold and placed into the stream of commerce and specifically within the State of Florida, the subject aircraft, as well as its component parts and systems, including, but not limited to, the subject aircraft's ice protection systems, flight control systems, auto-pilot, and its stall warning and protection system, and their associated components, and wrote and/or approved

warnings, advice, instructions and guidance for the subject aircraft, including its aircraft flight manual, aircraft operating manual, maintenance manual, maintenance and repair instructions, overhaul manual, service bulletins, inspection schedules and service life schedules, and/or performed maintenance thereon, and/or provided instruction, guidance concerning training and/or instruction with regard to the operation of the subject aircraft, including, but not limited to, with respect to flight in known icing conditions, the use of the auto-pilot and de-icing systems in known icing conditions, and upset recovery, including, but not limited to, recognizing, preventing and correcting an aerodynamic stall as well as the operation of the subject aircraft's de-icing and ice detection systems, and its stall warning and protection system and provided services that facilitated jet ownership, title transfer, and the purchase of the subject aircraft within the State of Florida.

- 19. Because this Defendant Embraer Aircraft Customer Services, Inc. conducted substantial and not isolated activity, and maintains its principal place of business in this state, this Court has both general and specific jurisdiction pursuant to Fla. Stat. § 48.193.
- 20. Defendant Embraer Executive Jet Services, LLC is a Delaware limited liability company with its principal place of business at 2008 General Aviation Drive, Melbourne, Florida 32935. The agent for service of process is Corporate Creations Network Inc., 11380 Prosperity Farms Road, Suite 221E, Palm Beach Gardens, Florida 33410.
- 21. At all times relevant herein Defendant Embraer Executive Jet Services, LLC was and is a wholly owned subsidiary of the Defendant Embraer. The Defendant Embraer had complete control, power and authority over Defendant Embraer Executive Jet Services, LLC's financial and operating policies, and/or was and is the controlling and principal entity over Defendant Embraer Executive Jet Services, LLC, and either in conjunction with Defendant

Embraer or on its own, Defendant Embraer Executive Jet Services, LLC designed, manufactured, assembled, inspected, tested, distributed, serviced, maintained, monitored, marketed, sold and placed into the stream of commerce and specifically within the State of Florida, the subject aircraft, as well as its component parts and systems, including, but not limited to, the subject aircraft's ice protection systems, flight control systems, auto-pilot, and its stall warning and protection system, and their associated components, and wrote and/or approved warnings, advice, instructions and guidance for the subject aircraft, including its aircraft flight manual, aircraft operating manual, maintenance manual, maintenance and repair instructions, overhaul manual, service bulletins, inspection schedules and service life schedules, and/or performed maintenance thereon, and/or provided instruction, guidance concerning training and/or instruction with regard to the operation of the subject aircraft, including, but not limited to, with respect to flight in known icing conditions, the use of the auto-pilot and de-icing systems in known icing conditions, and upset recovery, including, but not limited to, recognizing, preventing and correcting an aerodynamic stall as well as the operation of the subject aircraft's de-icing and ice detection systems, and its stall warning and protection system and provided services that facilitated jet ownership, title transfer, and the purchase of the subject aircraft within the State of Florida.

- 22. Because this Defendant Embraer Executive Jet Services, LLC conducted substantial and not isolated activity, and maintains its principal place of business in this state, this Court has both general and specific jurisdiction pursuant to Fla. Stat. § 48.193.
- 23. Defendant Embraer Executive Aircraft, Inc. is a Delaware corporation with its principal place of business at 1205 General Aviation Drive, Melbourne, Florida 32935. The

agent for service of process is Corporate Creations Network Inc., 11380 Prosperity Farms Road, Suite 221E, Palm Beach Gardens, Florida 33410.

At all times relevant herein Defendant Embraer Executive Aircraft, Inc. was and 24. is a wholly owned subsidiary of the Defendant Embraer. The Defendant Embraer had complete control, power and authority over Defendant Embraer Executive Aircraft, Inc.'s financial and operating policies, and/or was and is the controlling and principal entity over Defendant Embraer Executive Aircraft, Inc., and either in conjunction with Defendant Embraer or on its own, Defendant Embraer Executive Aircraft, Inc. designed, manufactured, assembled, inspected, tested, distributed, serviced, maintained, monitored, marketed, sold and placed into the stream of commerce and specifically within the State of Florida, the subject aircraft, as well as its component parts and systems, including, but not limited to, the subject aircraft's ice protection systems, flight control systems, auto-pilot, and its stall warning and protection system, and their associated components, and wrote and/or approved warnings, advice, instructions and guidance for the subject aircraft, including its aircraft flight manual, aircraft operating manual, maintenance manual, maintenance and repair instructions, overhaul manual, service bulletins, inspection schedules and service life schedules, and/or performed maintenance thereon, and/or provided instruction, guidance concerning training and/or instruction with regard to the operation of the subject aircraft, including, but not limited to, with respect to flight in known icing conditions, the use of the auto-pilot and de-icing systems in known icing conditions, and upset recovery, including, but not limited to, recognizing, preventing and correcting an aerodynamic stall as well as the operation of the subject aircraft's de-icing and ice detection systems, and its stall warning and protection system and provided services that facilitated jet ownership, title transfer, and the purchase of the subject aircraft within the State of Florida.

- 25. Because this Defendant Embraer Executive Aircraft, Inc. conducted substantial and not isolated activity, and maintains its principal place of business in this state, this Court has both general and specific jurisdiction pursuant to Fla. Stat. § 48.193.
- 26. Defendant Embraer Engineering & Technology Center USA, Inc. is a Delaware corporation with its principal place of business at 1400 General Aviation Drive, Melbourne, Florida 32901. The agent for service of process is Corporate Creations Network Inc., 11380 Prosperity Farms Road, Suite 221E, Palm Beach Gardens, Florida 33410.
- 27. At all times relevant herein Defendant Embraer Engineering & Technology Center USA, Inc. was and is a wholly owned subsidiary of the Defendant Embraer. The Defendant Embraer had complete control, power and authority over Defendant Embraer Engineering & Technology Center USA, Inc.'s financial and operating policies, and/or was and is the controlling and principal entity over Defendant Embraer Engineering & Technology Center USA, Inc., and either in conjunction with Defendant Embraer or on its own, Defendant Embraer Engineering & Technology Center USA, Inc. designed, manufactured, assembled, inspected, tested, distributed, serviced, maintained, monitored, marketed, sold and placed into the stream of commerce and specifically within the State of Florida, the subject aircraft, as well as its component parts and systems, including, but not limited to, the subject aircraft's ice protection systems, flight control systems, auto-pilot, and its stall warning and protection system, and their associated components, and wrote and/or approved warnings, advice, instructions and guidance for the subject aircraft, including its aircraft flight manual, aircraft operating manual, maintenance manual, maintenance and repair instructions, overhaul manual, service bulletins, inspection schedules and service life schedules, and/or performed maintenance thereon, and/or provided instruction, guidance concerning training and/or instruction with regard to the operation

of the subject aircraft, including, but not limited to, with respect to flight in known icing conditions, the use of the auto-pilot and de-icing systems in known icing conditions, and upset recovery, including, but not limited to, recognizing, preventing and correcting an aerodynamic stall as well as the operation of the subject aircraft's de-icing and ice detection systems, and its stall warning and protection system and provided services that facilitated jet ownership, title transfer, and the purchase of the subject aircraft within the State of Florida.

- 28. Because this Defendant Embraer Engineering & Technology Center USA, Inc. conducted substantial and not isolated activity, and maintains its principal place of business in this state, this Court has both general and specific jurisdiction pursuant to Fla. Stat. § 48.193.
- 29. At all times relevant herein, and specifically within the State of Florida, Defendants Embraer; Embraer Aircraft Holding, Inc.; Embraer Service, Inc.; Embraer Aircraft Customer Services, Inc.; Embraer Executive Jet Services, LLC; Embraer Executive Aircraft, Inc.; Embraer Engineering & Technology Center USA, Inc. (collectively the "Embraer Defendants") were and are inter-related companies, acted as agents of each other, acted in concert and collaboration, were and are part of a joint venture, and/or were and are the parent and subsidiaries of the other, and each individually and/or collectively were responsible for the design, manufacture, assembly, inspection, testing, distribution, service, maintenance, monitoring, marketing, sale and placement into the stream of commerce the subject aircraft, as well as its component parts and systems, including, but not limited to, the subject aircraft's icing protection systems, flight control systems, auto-pilot, and its stall warning and protection system, and their associated components, and wrote and/or approved warnings, advice, instructions and guidance for the subject aircraft, including its aircraft flight manual, aircraft operating manual, maintenance manual, maintenance and repair instructions, overhaul manual, service bulletins,

inspection schedules and service life schedules, and/or performed maintenance thereon, and/or provided instruction, warning and guidance concerning training and/or instruction with regard to the operation of the subject aircraft in this State and elsewhere, including, but not limited to, with respect to flight in known icing conditions, the use of auto-pilot in known icing conditions, and upset recovery, including, but not limited to, recognizing, preventing and correcting an aerodynamic stall as well as the operation of the subject aircraft's de-ice systems, and its stall warning and protection system, and/or since the Defendant Embraer, was and is the controlling and principal entity over all the Florida-based Embraer US entities, as alleged herein.

- 30. Defendant Embraer, knowledgeable about all matters concerning the design and safety of the Phenom 100 or otherwise should have been fully informed of these matters, through its US entities, was responsible for coordinating the sale, purchase, and acquisition of Phenom 100 aircraft for new customers such as Michael Rosenberg. As such, Defendant Embraer took on all responsibilities jointly and in concert with its U.S. entities as the manufacturer, designer, seller, of the Phenom 100 aircraft and became responsible to learn of, report, correct, and disclose all known and suspected design defects in the Phenom 100 and its systems.
- 31. On behalf of Embraer, the Embraer U.S. entities, knowledgeable about all matters concerning the design and safety of the Phenom 100 or otherwise should have been fully informed of these matters by Embraer, were responsible for coordinating the sale, purchase, and acquisition of Phenom 100 aircraft for new customers such as Michael Rosenberg. As such, the Embraer U.S. entities took on all responsibilities jointly and in concert with Embraer as the manufacturer, designer, seller, of the Phenom 100 aircraft and became responsible to learn of, report, correct, and disclose all known and suspected design defects in the Phenom 100 and its systems.

SUBJECT MATTER JURISDICTION AND VENUE

- 32. This is an action for damages in excess of \$15,000, exclusive of interest, costs, and attorney's fees, and therefore this Court has subject matter jurisdiction over it pursuant to Fla. Stat. § 26.012.
- 33. Venue for this action is properly laid in the Circuit Court of the Seventeenth Judicial Circuit, in and for Broward County, in that multiple Defendants have their principal offices in Broward County.

THE ACCIDENT AIRCRAFT

- 34. The Embraer EMB-500/Phenom 100 is a light jet designed and manufactured by the Embraer Defendants. It is designed, intended and certified to be flown by just a single pilot. The aircraft is marketed as the Phenom 100 and the United States Federal Aviation Administration (FAA) has issued a type certificate for the aircraft designating it the EMB-500. For ease of reference the aircraft will be referred to as "Phenom 100."
- 35. The Embraer Phenom 100 that was involved in the accident giving rise to this litigation was registered in the United States as N100EQ. Before this aircraft was purchased by Michael Rosenberg through Sage Aviation, LLC, it was operating in the country of France under a French registration number.
- 36. The Phenom 100 has an ice protection system that has both de-ice and anti-ice features. In theory, "de-ice" are systems that remove ice that has already formed, whereas "anti-ice" systems prevent ice from forming in the first place. For "de-icing" the Phenom 100 uses inflatable pneumatic de-icing boots that are affixed to the leading edges of the aircraft's wing and horizontal tail, where ice usually accumulates.

- 37. In theory, activation of the pneumatic de-icing system in the Phenom 100 causes the pneumatic boots to inflate and break away ice formed on the protected surfaces of the leading edges of the wings and horizontal tail. However, even after pneumatic boot operation, residual ice inevitably remains on the leading edge of the wing, ice can form between boot activation cycles, and ice can accumulate or run back on the unprotected surfaces of the aircraft.
- 38. On the subject Phenom 100, the Embraer Defendants elected not to incorporate a system that would notify the pilot when ice had begun to form on the wing leading edges.
- 39. The Embraer Defendants originally considered, evaluated and incorporated optical advisory ice sensor in the Phenom 100. An optical advisory ice sensor is an important safety feature, which provides objective confirmation to the pilot that ice is accreting on the aircraft.
- 40. Upon information and belief, even though the first ten (10) production models of the Phenom were manufactured with an optical advisory ice sensor, Embraer abandoned that safety feature, and the subject Phenom was manufactured and sold without an optical advisory ice sensor.
- 41. As a result, the Embraer Defendants placed the sole responsibility for identifying ice on the aircraft's wing upon the pilot, knowing that as a single-pilot there were numerous critical tasks that the pilot had to also perform.
- 42. Unlike most aircraft that use black pneumatic de-icing boots, the Phenom 100 uses silver de-icing boots making ice visual detection of accumulation difficult and in some cases, impossible.
- 43. After the abandonment of their ice detection system, the Embraer Defendants never incorporated a similar safety feature or otherwise changed the color of the pneumatic

deicing boot to facilitate ice detection by the pilot or an automatic system which activates without the need for pilot input when atmospheric conditions require.

- 44. Despite this fact, known to the Embraer Defendants, they elected not to use an automatic ice protection system, or anti-ice methods known to prevent accumulation of ice altogether such as TKS or a heated leading edge wing. These safer methods would prevent ice accumulation from occurring in the first place.
- 45. In addition, the Embraer Defendants were responsible for assuring that the pneumatic boot coverage across the leading edges of the wings and horizontal tail was adequate to prevent ice formation and accretion beyond the extent of the boot coverage and to prevent runback icing.
- 46. The Embraer Defendants' calculations and analysis, however, were inadequate and the Phenom 100 was designed in a manner that would allow the accumulation and/or run back of ice beyond boot coverage which would result in a change of the aerodynamic characteristics of the aircraft and the presence of such icing would remain undetected by a pilot.
- 47. The anti-ice system of the Phenom 100 is primarily limited to heating elements in certain air data sensors including the angle of attack sensors. The angle of attack sensors generally provide information to determine when the aircraft is flying too slowly and in danger of aerodynamically stalling (when the airflow over the wings no longer produces sufficient lift and the aircraft will depart controlled flight). Adequate and uninterrupted heating, and consequently anti-ice protection, to the angle of attack sensors is critical to ensure that they will operate properly and transmit correct information to the stall warning and protection computer.
- 48. The Phenom 100 aircraft is equipped with a stall warning and a stall protection system which is intended to alert the pilot if the aircraft is approaching an aerodynamic stall and

to prevent the onset of the stall if the pilot does not correct it before the aircraft reaches a predetermined angle of attack and/or speed.

- 49. An aerodynamic stall occurs when there is a disruption of airflow over the aircraft's wing causing it to lose the ability to produce lift. In flight, airflow moving over the curvature of the top surface of the wing creates a negative pressure which creates lift. As the nose of the aircraft pitches upwards, the angle of the leading edges of the wings in relation to the oncoming air (called "angle of attack") increase. If the angle of attack reaches a point where the airflow separates over the wing, the wing can no longer create lift, and an aerodynamic stall occurs. Under most circumstances, to prevent a stall, the nose of the aircraft must be pitched downward to reduce the angle of attack of the wings.
- 50. The primary components of the stall warning and protection systems of the Phenom 100 include the angle of attack sensors, the stall warning and protection computer, and the stick pusher.
- 51. The angle of attack sensors are mounted on each side of the forward fuselage and consist of two swept vanes that measure the direction of airflow. These sensors inform the stall warning and protection computer of the measured angle of attack.
- 52. The stall warning and protection computer monitors and processes the information received from the angle of attack sensors and when the measured values reach predefined levels, 1) provides an aural warning to the pilot of the onset of a stall, and 2) activates the stick pusher actuator to induce nose down pitch to avoid a stall.
- 53. The stick pusher actuator applies 150 pounds of nose down force to the pilot's control yoke to pitch the nose of the aircraft downward. A pilot has no ability to override stick pusher actuation. Stick pusher actuation causes the aircraft to lose up to 500 feet in altitude.

- 54. There is no back up or redundancy designed into the angle of attack sensing system. Therefore, if the angle of attack sensors malfunction or if their proper function is obstructed by environmental factors, the incorrect angle of attack measurements will be received by the stall warning and protection computer for monitoring and will cause the eventual activation of the stick pusher from which the pilot is helpless to overcome or override.
- 55. Moreover, there is no safety mechanism designed into the system to prevent the stick pusher from activating at low altitudes from which recovery is impossible. However, the Embraer Defendants failed to design the stick pusher actuation system so that it would not activate at altitudes from which its activation would make impact with the ground a certainty.
- 56. The environmental factor that detrimentally affects angle of attack effectiveness is icing. When aircraft operate in temperatures at or below the freezing point and in conditions where there is visible moisture, ice can form to the surface of the aircraft wing. Ice formation on the wing surface of the aircraft has the ability to disrupt airflow and alter the aerodynamic characteristics of the aircraft.
- 57. The Phenom 100 aircraft model has experienced failures in the heating elements of the angle of attach sensors, has experienced freezing of the components of the angle of attack sensors, and has suffered loss of control resulting from such mishaps.
- 58. The angle of attack sensors are capable of accumulating ice and will not provide accurate information to the stall warning and protection system computer. In addition, ice is capable of accumulating within the angle of attack sensor in a manner that impedes its ability to accurately measure angle of attack.
- 59. When ice affects the angle of attack sensor, the stall warning system and protection computer is unable to detect that it is receiving incorrect angle of attack information

and will trigger both the aural stall warning and stick pusher actuation despite the fact that the aircraft is flying straight and level at speeds above the stall speed.

- 60. In 2011, the FAA found that an unsafe condition existed in the Phenom 100 aircraft fleet because of defective angle of attack sensors and ordered the replacement of the angle of attack sensors with a design believed to be capable of preventing ice accumulation within the sensor.
- 61. The United States regulatory action came after Embraer issued a service bulletin requiring certain maintenance actions and replacements to be made of the angle of attack sensor assemblies. The Embraer service bulletin, however, was not adequate and it did nothing to prevent ice accumulation on the angle of attack canted vane and did nothing to correct the propensity of the angle of attack sensor heating element to fail.
- 62. When the United States aviation regulatory authorities investigated the issuance of an airworthiness directive against Embraer for the unsafe condition of the angle of attack sensor system, it did so with direct communications and contact with Embraer. Embraer was required to actively engage with the United States authorities in connection with the investigation of the unsafe condition.
- 63. However, like the inadequate service bulletin that Embraer had caused to be issued in the United States, the airworthiness directive too was inadequate because Embraer did not disclose its full knowledge of the design defects inherent in the ice protection system as well as the other systems addressed herein.
- 64. Because of Embraer's lack of candor with United States regulatory authorities on these important safety matters, the Phenom 100 was permitted to continue in operation in the

United States and elsewhere without adequate corrective measures being taken to make the aircraft safe for flight.

- 65. Michael Rosenberg's acquisition of the aircraft, discussed below, is a direct result of Embraer's concealment of information from United States regulatory authorities.
- 66. A yaw trim servo failure, which the subject aircraft had experienced in the months before the accident will cause the aircraft to lose airspeed on account of drag induced by the lateral movement of the aircraft's nose. When this malfunction occurs in a critical phase of flight, such as when the aircraft is already operating at an approach/landing configuration and speed, the added loss of airspeed can cause the aircraft to approach the stall speed triggering the stall warning and protection system actuation. Given the short moment arm of the Phenom 100, meaning the short distance between the aircraft's center of gravity and the forces acting on the aft and forward ends of the aircraft, the Embraer Defendants were obligated to take every care and precaution not to design flaws into the aircraft and its systems that could induce a loss of control from which recovery was not possible.
- 67. Furthermore, the Embraer Defendants were required to identify, report, disclose, or otherwise warn, about any unsafe condition in their product which could cause the loss of control, but they all failed to do so.

MICHAEL ROSENBERG'S QUALIFICATIONS TO OPERATE THE PHENOM 100

- 68. Michael Rosenberg held an FAA issued Airline Transport Pilot Certificate with Airplane Single Engine Land and Multi-Engine Land Ratings. He was also an FAA certified flight instructor with ratings for single engine land. He held a Second Class medical certificate.
- 69. Michael Rosenberg held over 4,736.5 flight hours' experience. He had logged 135.9 hours in the Phenom 100.

- 70. Michael Rosenberg held a type rating for the Phenom 100. He obtained this type rating after engaging in extensive study and training. He underwent training in France in connection with the purchase of the aircraft. He underwent training in the United States from several entities and accumulated over 45 hours of training before being type rated in the aircraft.
- 71. Michael Rosenberg's pilot ratings, certificates, and licenses were all current at the time of the accident.
- 72. Because the Embraer Defendants provided no warnings or special instructions concerning the ability of Phenom 100 to depart controlled flight under the conditions discussed above, Michael Rosenberg was completely unaware of these unsafe conditions in the Phenom 100 and was lulled by these Defendants into a false sense of security in the purchase of the aircraft and in the operation of the aircraft.
- 73. Had Michael Rosenberg been made aware of the dangerous characteristics of the aircraft and its components he would not have purchased it.

ACQUISITION OF THE SUBJECT PHENOM 100

- 74. In early 2014, in connection with the purchase of the subject Phenom 100, Embraer, from its offices in Brazil, contacted Rosenberg to coordinate subscriptions to Embraer technical publications and to coordinate a United States Field Service Representative to assist in the international transfer and acclimate Rosenberg to jet aircraft ownership.
- 75. Embraer assigned customer support to Rosenberg in Florida through its United States agent, subsidiary, presence, and partner Embraer Executive Jets. This United States presence of Embraer facilitated Rosenberg's ownership of the Phenom 100 through coordination of maintenance plans and title.

- 76. Embraer, through Embraer U.S. entities, also traveled to France to facilitate the logistics concerning transfer of the Phenom 100 from France to the United States.
- 77. During the process of transitioning title from France to the United States, the accident aircraft experienced a yaw trim servo malfunction. This fault was addressed by Embraer support in Brazil. Embraer's engineers in Brazil monitored the progress of this maintenance event and requested periodic updates.
- 78. Embraer forwarded technical publications updates to the new owner of the accident aircraft, Michael Rosenberg.
- 79. Embraer also designated approved service centers, in the United States and recommended said service centers to Phenom owners and operators, including Michael Rosenberg, to handle the maintenance on the accident aircraft.
- 80. With Embraer's designation and approval, Michael Rosenberg selected an approved service center to perform maintenance on the accident Phenom 100, including such maintenance as addressing the Yaw Trim Servo Failure annunciation, and Embraer engineers, from Brazil, directed the fix for the Yaw Trim Servo Failure annunciation.

THE DECEMBER 8, 2014 ACCIDENT

- 81. On December 8, 2014, Michael Rosenberg was piloting the subject aircraft on a flight from Horace Williams Airport in Chapel Hill, North Carolina to Montgomery Municipal County Airpark in Gaithersburg, Maryland (the "Gaithersburg Airpark").
- 82. Michael Rosenberg demonstrated that he was knowledgeable on how to use the Phenom 100's ice protection system. He activated it when he encountered icing conditions along his flight path at approximately 23,000 ft. During that time, ice, if any, not broken away from boot operation remained on the leading edge of the wings and horizontal tail as residual ice.

- 83. Michael Rosenberg utilized the aircraft's Garmin 1000 autopilot system according to its operating instructions and limitations.
- 84. The cockpit voice recorder transcript reveals that the last conversation among the occupants occurred between 10:40:37 and 10:40:38 at which time the occupants confirmed they had what is believed to be the airport in sight "straight ahead." There was no sign of concern or distress in this exchange.
- 85. Between 10:40:38 and 10:41:31 there are no indications of concern from any of the occupants of the aircraft, however, the data recorded by the flight data recorder shows that the aircraft began pitching upward at an unnatural rate.
- 86. At 10:41:35, the aircraft's stall warning protection system's aural annunciation of a stall occurred, the autopilot decoupled, and the aircraft experienced an immediate aerodynamic stall. The aircraft experienced several roll oscillations over the subsequent 14 seconds. Included in this sequence, upon information and belief, was the activation of the stick pusher system.
- 87. The occurrence of these events was completely unsuspected by the pilot, contrary to the aircraft's published data and procedures, and the result of the malfunctions and design/manufacturing defects discussed herein.
- 88. The pilot was unable to recover the aircraft from the effect of the stall, roll oscillations, and possible automated stick pusher actuation due to the malfunctions and defects discussed herein (including but not limited to, failure to install adequate ice detection/protection systems as discussed herein).
- 89. As a result of the malfunctions and defectively designed systems of the Phenom 100 aircraft discussed herein, the subject aircraft departed controlled flight at an altitude approximately 300 ft. above the ground and impacted the ground in a residential neighborhood.

DAMAGES

- 90. Michael Rosenberg and the other passengers on board were killed in the accident after suffering serious bodily injuries and fear of impending death due to the violent and uncontrolled aerodynamic movements of the aircraft and his efforts to overcome the power of the stick pusher system.
- 91. Michael Rosenberg is survived by his wife Alicia Paladin and his children Caroline and Zachary Rosenberg who as a result of the death of Michael Rosenberg have suffered unspeakable grief, mental anguish, and pain and suffering. They have suffered pecuniary and non-pecuniary loss and damages for which they are entitled to recover compensatory damages, including but not limited to loss of support, services, nurture, care, guidance, assistance, affection, society, solace, protection, companionship, moral support, guidance, counsel, inheritance, net accumulations, mental anguish, funeral expenses, and all other damages compensable under applicable law.

COUNT I Strict Liability Plaintiff vs. The Embraer Defendants

- 92. Plaintiffs incorporate paragraphs 1-91 by reference as if fully set forth herein to support this cause of action.
- 93. The Embraer Defendants designed, manufactured, assembled, inspected, tested, distributed, serviced, maintained, monitored, repaired, marketed and/or introduced into the stream of commerce the Phenom 100 registered as N100EQ and its component parts, including but not limited to the aircraft's ice protection system, flight control systems, autopilot system, stall warning and protection systems, and flight instrumentation systems, along with instructions,

warnings, flight operations, flight training, and maintenance manuals for the aircraft and its component parts.

- 94. To the extent the Embraer U.S. entities are found not to have physically manufactured the subject aircraft, they do stand in the shoes as de facto manufacturers by virtue of being the United States' presence, alter ego, joint venture, agent, partner, and unduly controlled subsidiary which enables Embraer to market, service, repair, maintain and support its aircraft and maintain its continuing airworthiness, safety and customer support obligations in the United States. Furthermore, the Embraer U.S. entities, through the facilitation of the sale of the subject aircraft, are the de facto sellers as well.
- 95. The Embraer Defendants and their parents, subsidiaries, affiliates, associates, and partners, at all relevant times, were the agents, servants, employees, assignees, successors in interest, or a joint venturers of each other, and were acting within the time, purpose, or scope of such agency or employment, and all acts or omissions alleged herein of each of the Embraer Defendants were authorized, adopted, approved, or ratified by the others and done with the common purpose to manufacture, design, test, assemble, market, distribute, service, repair, maintain and support Embraer manufactured aircraft in the United States.
- 96. On December 8, 2014, the subject aircraft and its component parts and systems, including, but not limited to, the subject aircraft's icing protection system, flight control systems, auto-pilot, and its stall warning and protection system, and their associated components, and their attendant warnings, advice, instructions and guidance, were being operated and used for the purposes and in the manner for which they were designed, manufactured, assembled, inspected, tested, distributed, sold, serviced, maintained, and/or repaired, and intended to be used, in a

manner reasonably foreseeable to the Embraer Defendants, and in a condition without substantial change from their original condition when sold by the Embraer Defendants.

97. The Embraer Defendants sold and/or marketed and/or placed in the stream of commerce products that were defective and unreasonably dangerous to persons, including Plaintiffs decedent, Michael Rosenberg, who could reasonably be expected to use or benefit from them, and which defective and unreasonably dangerous conditions.

98. These defects included:

Ice Protection System Allegations

- a. A defectively designed ice protection system that lacked automatic activation at appropriate environmental conditions;
- b. A defectively designed ice protection system that lacked ice detection devices, as well as appropriate visual means with respect to visual recognition of ice accretion on the subject aircraft, even though the first ten (10) production models of the subject aircraft were manufactured with ice detection devices, especially since the subject aircraft was marketed and sold to the aviation community as a turbo-jet aircraft for operation by a single pilot;
- c. A defectively designed ice protection system that was not capable of clearing ice from areas of the wings and horizontal stabilizer protected by pneumatic deicing boots;
- d. A defectively designed ice protection system that included deicing boots that were colored silver which made detection of ice accumulation difficult and in some cases impossible;

- e. A defectively designed ice protection system that included pneumatic deice boots that were not properly sized or placed to provide adequate ice clearance, prevent the accumulation/accretion of runback icing, or otherwise was unsuitable for the job intended to be performed;
- f. A defectively designed ice protection system that was conceived of without actual or adequate testing or analysis and was not capable of clearing sufficient amount of ice accumulation to prevent loss of control of an aircraft;
- g. A defectively designed ice protection system that was susceptible to contamination in the internal components of the system such as ejector flow valves, pressure regulator valves, and pneumatic lines or otherwise subject to degradation in pressure with no warning to the pilot;
- h. A defectively designed ice protection system that lacked anti-ice protection on the leading edge of the aircraft's wings and horizontal tail;
- i. A defectively designed ice protection system that does not operate as certified, advertised, in accordance with operating manual, or in accordance with training material provided to pilots or otherwise was incapable to ensuring the aircraft could operate safely under all atmospheric conditions required for certification;
- j. An ice protection system that was otherwise defectively designed and/or manufactured such that it was unreasonably dangerous;

Stall Warning Stick Pusher Allegations

k. A defectively designed stall warning and protection system which was capable of causing stick pusher activation at low altitudes from which recovery was unlikely or impossible;

- A defectively designed stall warning and protection system that lacked any safety feature to prevent stick pusher actuator activation at altitudes and/or speeds from which recovery was unlikely or impossible;
- m. A defectively designed stall warning and protection system which does not provide adequate and timely warning to the pilot of an impending aerodynamic stall in a timely manner to allow the pilot to take appropriate action;
- n. A defectively designed stall warning and protection system which incorporated angle of attack sensors prone to malfunction, freezing, ice accumulation, heating element failure, and otherwise prone to disseminate incorrect angle of attack information to the aircraft's computing systems;
- o. A. defectively designed stall warning and protection system which provided no quick release control or other method for the pilot to quickly and positively disengage, overcome, override, or deactivate unwanted stick pusher actuation;
- p. A defectively designed stall warning and protection system which provided inadequate pre-notice of stick pusher actuation activation;
- q. A defectively designed stall warning and protection system which included a stick pusher actuator that imparted forces to the control yoke that surpassed reasonable human strength to overcome;
- r. A defectively designed stall warning and protection system which does not operate in accordance with its certification, operating instructions, or training material provided to pilots;
- s. A stall warning and protection system that was otherwise defectively designed and/or manufactured such that it was unreasonably dangerous;

Autopilot Allegations

- t. A defectively designed autopilot system that allowed the aircraft to enter an aerodynamic stall or otherwise did not decouple with sufficient advanced warning given to the pilot to recover from an impending stall;
- u. A defectively designed autopilot system that was susceptible to servo malfunctions in the yaw, pitch, and roll axes;
- v. A defectively designed autopilot system that was capable of decoupling when the aircraft control surfaces were trimmed in a configuration that imparted immediate forces to the pilot's control yoke inducing loss of control of the aircraft;
- w. A defectively designed autopilot system that lacked an auto throttle system to ensure that the aircraft did not slow to speeds close to stall;
- x. A defectively designed autopilot system that does not operate as certified, advertised, in accordance with operating manual, or in accordance with training material provided to pilots;
- y. An autopilot system that was otherwise defectively designed and/or manufactured such that it was unreasonably dangerous;

Omnibus Aircraft Allegation

z. A defectively designed aircraft that because of all the design defects discussed above should have been designed with an auto-throttle system, automatic ice detection system, automatic ice protection system, low speed warning system, stick pusher altitude limitations, stick pusher override, anti-ice protection on the wings and horizontal tail, and/or properly colored deicing boots;

- aa. A defectively designed aircraft and component systems identified above that that were so likely to be harmful that a reasonable person who had actual knowledge of their potential for producing injury or death would conclude that they should not have been marketed and sold in that condition;
- bb. An aircraft that was otherwise defectively designed and/or manufactured such that it was unreasonably dangerous;

Warnings and Manuals

- cc. Defective and inadequate instructions, warnings, information, and training material concerning the use of the auto-pilot in icing conditions, especially since the auto-pilot was not equipped with an auto-throttle during low altitude operations, all contrary to guidance issued by various U.S. government agencies including the Federal Aviation Administration and/or the National Transportation Safety Board;
- dd. Defective and inadequate instructions, warnings, information, and training material concerning proper and safe use of the ice protection system, given known prior in-flight icing events, especially since the subject aircraft was marketed and sold to the aviation community as a turbo-jet aircraft for operation by a single pilot;
- ee. Defective and inadequate instructions, warnings, information, and training material concerning the dangers of operating in icing conditions, especially given that the subject aircraft was not equipped with an optical advisory ice sensor or aircraft icing protection system;
- ff. Defective and inadequate instructions, warnings, information, and training material concerning the fact that even minimal amounts of ice contamination could cause a stall if ice protection system does not remove residual ice;

- gg. Defective and inadequate instructions, warnings, information, and training material concerning the aircraft's stall characteristics;
- hh. Defective and inadequate instructions, warnings, information, and training material concerning the aircraft's stick pusher activation characteristics;
- Defective and inadequate instructions, warnings, information, and training
 material concerning recovery and prevention of aerodynamic stall;
- jj. Defective and inadequate instructions, warnings, information, and training material concerning the aircraft's capabilities for flight in icing conditions;
- kk. Defective and inadequate instructions, warnings, information, and training material concerning the aircraft's autopilot system;
- Il. Defective and inadequate instructions, warnings, information, and training material concerning unstable and unpredictable flight characteristics of the aircraft in light if the design defects described herein;
- mm. Defective and inadequate instructions, warnings, information and training material that fail to include proper warnings and/or instructions as to the dangers associated with the design and foreseeable maintenance and/or use of the subject aircraft and its associated systems and how to avoid such dangers, which defects rendered the subject aircraft and its associated systems defective and unreasonably dangerous to persons;
- nn. Defective and inadequate instructions, warnings, information and training material that were so likely to be harmful that a reasonable person who had actual knowledge of their potential for producing injury or death would conclude that they should not have been marketed and sold in that condition; and

- oo. Instructions, warnings, information and training material that were otherwise defective and inadequate.
- 99. The defective and unreasonably dangerous Phenom 100, associated systems, and dangerously inadequate manuals and warnings sold and/or marketed and/or supplied by the Embraer Defendants were a substantial factor in causing the December 8, 2014 crash and Michael Rosenberg's resulting injuries and death as well as the damages inflicted upon the statutory survivors as a result thereof and his estate, and the Embraer Defendants are strictly liable for the resulting damages.

WHEREFORE, Plaintiff demands judgment against the Embraer Defendants for compensatory damages, plus interest, costs, attorney's fees and other such relief as the Court deems appropriate.

COUNT II Negligence Plaintiff vs. The Embraer Defendants

- 100. Plaintiffs incorporate paragraphs 1-99 by reference as if fully set forth herein to support this cause of action.
- 101. The Embraer Defendants owed Plaintiff's decedent, Michael Rosenberg, a duty of reasonable care in the design, manufacture, testing, continuing airworthiness, and marketing of the Phenom 100 registered as N100EQ and its component parts, systems, manuals, instructions, and warnings.
- 102. The Embraer Defendants negligently designed, manufactured, tested, marketed, maintained, updated, and repaired the Phenom 100 registered as N100EQ and its component parts, systems, manuals, instructions, and warnings in that they, among other things:

Ice Protection System Allegations

- a. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed ice protection system that lacked automatic activation at appropriate environmental conditions;
- b. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed ice protection system that lacked ice detection devices, as well as appropriate visual means with respect to visual recognition of ice accretion on the subject aircraft, even though the first ten (10) production models of the subject aircraft were manufactured with ice detection devices, especially since the subject aircraft was marketed and sold to the aviation community as a turbo-jet aircraft for operation by a single pilot;
- c. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed ice protection system that was not capable of clearing ice from areas of the wings and horizontal stabilizer protected by pneumatic deicing boots;
- d. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed ice protection system that included deicing boots that were colored silver which made detection of ice accumulation difficult and in some cases impossible;
- e. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed ice protection system that included pneumatic deice boots that were not properly sized or placed to provide

adequate ice clearance, prevent the accumulation/accretion of runback icing, or otherwise was unsuitable for the job it was intended to perform;

- f. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed ice protection system that was conceived of without actual or adequate testing or analysis and was not capable of clearing sufficient amount of ice accumulation to prevent loss of control of an aircraft;
- g. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed ice protection system that was susceptible to contamination in the internal components of the system such as ejector flow valves, pressure regulator valves, and pneumatic lines;
- h. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed ice protection system that lacked anti-ice protection on the leading edge of the aircraft's wings and horizontal tail;
- i. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed ice protection system that does not operate as certified, advertised, in accordance with operating manual, or in accordance with training material provided to pilots;
- j. Otherwise Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed and/or manufactured an ice protection system that was unreasonably dangerous;

Stall Warning Stick Pusher Allegations

k. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed stall warning and protection

system which was capable of causing stick pusher activation at low altitudes and/or speeds from which recovery was unlikely;

- 1. Failed to design, manufacture and assemble the accident aircrast and its component parts and systems free of a defectively designed stall warning and protection system that lacked any safety feature to prevent stick pusher actuator activation at altitudes from which recovery was unlikely;
- m. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed stall warning and protection system which does not provide adequate and timely warning to the pilot of an impending aerodynamic stall in a timely manner to allow the pilot to take appropriate action;
- n. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of defectively designed stall warning and protection system which incorporated angle of attack sensors prone to malfunction, freezing, ice accumulation, heating element failure, and otherwise prone to disseminate incorrect angle of attack information to the aircraft's computing systems;
- o. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed stall warning and protection system which provided no quick release control or other method for the pilot to quickly and positively disengage, overcome, override, or deactivate unwanted stick pusher actuation;
- p. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed stall warning and protection system which provided inadequate pre-notice of stick pusher actuation activation;

- q. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed stall warning and protection system which included a stick pusher actuator that imparted forces to the control yoke that surpassed reasonable human strength to overcome;
- r. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed stall warning and protection system which does not operate in accordance with its certification, operating instructions, or training material provided to pilots;
- s. Otherwise Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed and/or manufactured a stall warning and protection system that was unreasonably dangerous;

Autopilot Allegations

- t. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed autopilot system that allowed the aircraft to enter an aerodynamic stall or otherwise did not decouple with sufficient advanced warning given to the pilot to recover from an impending stall;
- u. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed autopilot system that was susceptible to servo malfunctions in the yaw, pitch, and roll axes.
- v. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed autopilot system that was capable of decoupling when the aircraft control surfaces were trimmed in a configuration

that imparted immediate forces to the pilot's control yoke inducing loss of control of the aircraft;

- w. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed autopilot system that lacked an auto throttle system to ensure that the aircraft did not slow to speeds close to stall;
- x. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed autopilot system that does not operate as certified, advertised, in accordance with operating manual, or in accordance with training material provided to pilots;
- y. Otherwise Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed and/or manufactured an autopilot system that was unreasonably dangerous;

Omnibus Aircraft Allegation

- z. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed aircraft that because of all the design defects discussed above should have been designed with an auto-throttle system, automatic ice detection system, automatic ice protection system, low speed awareness system, stick pusher altitude limitations, stick pusher override, anti-ice protection on the wings and horizontal tail, and/or properly colored deicing boots;
- aa. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of a defectively designed aircraft and component systems identified above that that were so likely to be harmful that a reasonable person

who had actual knowledge of their potential for producing injury or death would conclude that they should not have been marketed and sold in that condition;

- bb. Failed to design, manufacture and assemble the accident aircraft and its component parts and systems free of all defects, including but not limited to the subject aircraft's anti-icing and de-icing systems, flight control systems, autopilot, stall warning and protection systems, and their associated components, instructions and manuals;
- cc. Failed to design, manufacture and assemble the accident aircraft and said component parts and systems in such a way as to assure it was safe and appropriate for its intended use;
- dd. Failed to properly and adequately test and monitor the accident aircraft and its component parts and systems so as to learn of its inherent inability to perform safely in atmospheric icing conditions;
- ee. Failing to equip the accident aircraft with an effective low-airspeed alert system;
- ff. Failing to equip the accident aircraft with an effective ice detection and de-icing system;
 - gg. Failing to equip the accident aircraft with an anti-ice system.
- hh. Failing to equip the aircraft with deicing boots of a color that did not mask the detection of ice.
- ii. Failing to equip the accident aircraft with an effective stall warning system;
- jj. Failing to equip the accident aircraft with a stick pusher actuation system that did not activate at altitudes from which recovery was not possible;

- kk. Failing to equip the accident aircraft with a stick pusher actuation system that had an override system.
- Failing to equip the accident aircraft with an effective angle of attack indicator and warning system;
 - mm. Failing to equip the accident aircraft with safe stick pusher system;
- nn. Failing to equip the accident aircraft with an effective auto-throttle system in order to assure appropriate airspeed is maintained in icing conditions;
- oo. Failing to correct known structural wing icing problems in the accident aircraft;
- pp. Failing to provide adequate instructions, manuals, and warnings of known hazards associated with the operation of the accident aircraft in atmospheric icing conditions, and how to avoid or preclude such hazards in the course of flight operations;
- qq. Failing to Failing to provide adequate instructions, manuals, and warnings of known hazards associated with flight and stall characteristics that are specific to the accident aircraft and its stall warning systems, and how to recognize, avoid, preclude, or recover from those hazards in the course of flight operations;

Warnings and Manuals

rr. Issuing defective and inadequate instructions, warnings, information, and training material concerning the use of the auto-pilot in icing conditions, especially since the auto-pilot was not equipped with an auto-throttle during low altitude operations, all contrary to guidance issued by various U.S. government agencies including the Federal Aviation Administration and/or the National Transportation Safety Board;

- ss. Issuing defective and inadequate instructions, warnings, information, and training material concerning proper and safe use of the ice protection system, given known prior in-flight icing events, especially since the subject aircraft was marketed and sold to the aviation community as a turbo-jet aircraft for operation by a single pilot;
- tt. Issuing defective and inadequate instructions, warnings, information, and training material concerning the dangers of operating in icing conditions, especially given that the subject aircraft was not equipped with an optical advisory ice sensor or aircraft icing protection system;
- uu. Issuing defective and inadequate instructions, warnings, information, and training material concerning the fact that even minimal amounts of ice contamination could cause a stall if ice protection system does not remove residual ice;
- vv. Issuing defective and inadequate instructions, warnings, information, and training material concerning the aircraft's stall characteristics;
- ww. Issuing defective and inadequate instructions, warnings, information, and training material concerning the aircraft's stick pusher activation characteristics;
- xx. Issuing defective and inadequate instructions, warnings, information, and training material concerning recovery and prevention of aerodynamic stall;
- yy. Issuing defective and inadequate instructions, warnings, information, and training material concerning the aircraft's ice flight into icing conditions capabilities;
- zz. Issuing defective and inadequate instructions, warnings, information, and training material concerning the aircraft's autopilot system;

aaa. Issuing defective and inadequate instructions, warnings, information, and training material concerning unstable and unpredictable flight characteristics of the aircraft in light if the design defects described herein;

bbb. Issuing defective and inadequate instructions, warnings, information and training material that fail to include proper warnings and/or instructions as to the dangers associated with the design and foreseeable maintenance and/or use of the subject aircraft and its associated systems and how to avoid such dangers, which defects rendered the subject aircraft and its associated systems defective and unreasonably dangerous to persons;

ccc. Issuing defective and inadequate instructions, warnings, information and training material that were so likely to be harmful that a reasonable person who had actual knowledge of their potential for producing injury or death would conclude that they should not have been marketed and sold in that condition;

ddd. Issuing instructions, warnings, information and training material that were otherwise defective and inadequate;

eee. Carelessly and recklessly coordinating the sale and purchase of the accident aircraft to Michael Rosenberg without disclosing all of the design defects identified above;

fff. Carelessly and recklessly coordinating the issuance of technical publications to Michael Rosenberg that failed to disclose all of the design defects identified above or otherwise provide information to him that would have avoided the accident;

- ggg. Carelessly and recklessly concealing information about the design deficiencies from each other so that the entities in direct communications with purchasers like Michael Rosenberg would not have adequate information about the dangers associated with the aircraft identified above;
- hhh. Carelessly and recklessly failed to inform regulatory authorities of the aforementioned design defects and problems with the Phenom 100 which also constitutes a violation of federal regulatory law; and
- iii. The Embraer Defendants were otherwise, careless, negligent, and/or reckless as will be proven at trial.
- 103. The Embraer Defendants knew, or in the exercise of ordinary care should have known, that the Phenom 100 registered as N100EQ and its component parts, systems, manuals, instructions, and warnings were defective and unreasonably dangerous to those persons likely to use the aircraft and component parts for the purposes and in the manner for which they were intended to be used and for purposes reasonably foreseeable to the Embraer Defendants.
- 104. The Embraer Defendants knew, or in the exercise of ordinary care should have known, how to design, manufacture, test, and equip the subject aircraft, its de-icing and ice detection systems, flight control systems, low airspeed warning systems, stall warning systems, stick pusher systems, instructions, and manuals so as to prevent the type of incident and resulting injuries and death described in this Complaint.
- 105. The Embraer Defendants had actual knowledge of how to design, build, and test an aircraft, its de-icing and ice detection systems, flight control systems, low airspeed warning systems, stall warning systems, stick pusher systems, instructions, and manuals such that the

aircraft and its systems, instructions, and manuals would not be inadequate or unreasonably dangerous.

- adequate or proper warnings or instructions to ordinary and foreseeable users of the Phenom 100 registered as N100EQ and its component parts and systems, including Michael Rosenberg, and failed to recall or timely recall the products or make appropriate post-sale efforts, including but not limited to post-sale warnings and instructions, to prevent incidents such as the crash described herein.
- 107. Because the Phenom 100 is also subject to certain design standards as minimum standards under federal regulatory law, the design defects and negligence alleged herein also constitutes violation of those standards and therefore constitutes negligence per se because those regulations are implemented to protect the safety of the class of persons of which Plaintiff's decedent Michael Rosenberg belonged.
- 108. The Embraer Defendants' negligence was a direct and proximate cause of the loss of control and crash of the Phenom 100 registered as N100EQ and Michael Rosenberg's resulting injuries and death as well as the damages inflicted upon the statutory survivors as a result thereof and his estate.

WHEREFORE, Plaintiff demands judgment against the Embraer Defendants for compensatory damages, plus interest, costs, attorney's fees and other such relief as the Court deems appropriate.

COUNT III Breach of Contract Plaintiff vs. The Embraer Defendants

- 109. Plaintiffs incorporate paragraphs 1-108 by reference as if fully set forth herein to support this cause of action.
- 110. The Embraer Defendants, individually, collectively, in concert with each other, and as part of and in furtherance of their joint venture and common plan, contracted with Michael Rosenberg to coordinate the transfer and sale of the subject Phenom 100 aircraft and to acclimate Rosenberg into jet ownership.
- 111. This service offered by the Embraer Defendants was in furtherance of the original sale of the subject aircraft insofar is it benefited all of them to maintain the entire fleet of multimillion dollar jet aircraft in operation.
- 112. It was also done in furtherance of their obligations to ensure the continuing airworthiness of their fleet of aircraft insofar as it coordinated the delivery of technical publications, inspections, maintenance services, and all other matters necessary of private jet ownership.
- 113. The Embraer Defendants breached their contractual obligations by failing to disclose, warn, correct the defects in the Phenom 100 identified above and coordinated the transfer of a dangerously defective aircraft and misleading product literature to Michael Rosenberg.
- 114. The Embraer Defendants breached their contractual obligations by engaging in the negligent acts identified above and coordinated the transfer of a dangerously defective aircraft and misleading product literature to Michael Rosenberg.

115. The Embraer Defendants' breaches of contract, was a direct and proximate cause of the loss of control and crash of the Phenom 100 registered as N100EQ and Michael Rosenberg's resulting injuries and death as well as the damages inflicted upon the statutory survivors as a result thereof and his estate.

WHEREFORE, Plaintiff demands judgment against the Embraer Defendants for compensatory damages, plus interest, costs, attorney's fees and other such relief as the Court deems appropriate.

COUNT IV Breach of Express and Implied Warranties Plaintiff vs. The Embraer Defendants

- 116. Plaintiffs incorporate paragraphs 1-115 by reference as if fully set forth herein to support this cause of action.
- 117. In connection with the original sale of the aircraft and the purchase of the aircraft by Michael Rosenberg, the Embraer Defendants expressly and implicitly warranted that the Phenom 100 aircraft acquired by Michael Rosenberg was airworthy, free of design defects, merchantable, and fit for a particular purpose.
- 118. The foregoing warranties ran directly to Michael Rosenberg and indirectly to him as an intended or consequential beneficiary and he relied upon them in the operation and purchase of the aircraft.
- 119. The Embraer Defendants breached these express and implicit warranties by failing to disclose, warn, correct the defects in the Phenom 100 identified above and coordinated the transfer of a dangerously defective aircraft and misleading product literature to Michael Rosenberg.

120. The Embraer Defendants breached these express and implicit warranties by engaging in the negligent acts identified above and coordinated the transfer of a dangerously

defective aircraft and misleading product literature to Michael Rosenberg.

The Embraer Defendants' breaches of express and implied warranties was/were a

direct and proximate cause of the loss of control and crash of the Phenom 100 registered as

N100EQ and Michael Rosenberg's resulting injuries and death as well as the damages inflicted

upon the statutory survivors as a result thereof and his estate.

WHEREFORE, Plaintiff demands judgment against the Embraer Defendants for

compensatory damages, plus interest, costs and other such relief as the Court deems appropriate.

JURY DEMAND

Plaintiff demands trial by jury on all counts which are amenable to trial by jury.

Dated: December 5, 2016

Respectfully submitted,

SPOHRER & DODD, P.L.

Robert F. Spohrer, Esquire Florida Bar No.: 184500

701 W. Adams Street, Suite 2

Jacksonville, FL 32204 Telephone: (904) 309-6500 Facsimile: (904) 309-6501

Email: rspohrer@sdlitigation.com

iheape@sdlitigation.com

KREINDLER & KREINDLER LLP

Daniel O. Rose Brian Alexander Evan Katin-Borland (pro hac vice applications to be filed) 750 Third Avenue New York NY 10017 (212) 973-3414 / Fax (212) 972-9432

Email: drose@kreindler.com
Email: balexander@kreindler.com
Email: ekatinborland@kreindler.com

Attorneys for Plaintiff