IN THE UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF TEXAS Fort Worth Division

IVY GROSHONG-GALLIHER,	Ş
Individually and as Representative of	§
THE ESTATE OF JACOB GALLIHER	§
and as Next Friend of	8
MALCOM GROSHONG-GALLIHER	8
and as Next Friend of	§
KILLIAN GROSHONG-GALLIHER,	8
and acting for the benefit of	
herself and all beneficiaries of Jacob Galliher	
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Plaintiffs,	§
,	8
v.	§
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BELL TEXTRON, INC.,	8
THE BOEING COMPANY, and	8
UNIVERSAL STAINLESS & ALLOY	8
PRODUCTS, INC.,	8
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Defendants	
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COMPLAINT

Come now, Plaintiffs, who file their original complaint, and would respectfully show the Court as follows.

PARTIES

1. Plaintiff, the Estate of Jacob Galliher, is the estate of a citizen of Florida who died at age 24 while serving as a Staff Sergeant in the United States Air Force in a crash of a Boeing Bell V-22 Osprey immediately off the coast of Japan. Before death, Jacob Galliher had registered to vote in Florida and purchased a home in Florida that he owned at the time of his death. The legal representative of the Estate is Ivy Groshong-Galliher, but, pursuant to 28 U.S.C. § 1332(c)(2), when acting in that capacity, she has the same Florida citizenship as the decedent had at the time of his death. *Palmer v. Hosp. Auth. of Randolph Cnty.*, 22 F.3d 1559, 1562 n.1 (11th Cir. 1994).

- 2. Plaintiff, Ivy Groshong-Galliher, a natural person and citizen of Massachusetts, also brings suit in her own capacity and on her own behalf, and as a representative of the children and parents of Jacob Galliher.
- 3. Plaintiff, Malcom Groshong-Galliher, a minor, is represented by Ivy Groshong-Galliher in her capacity as next friend and is a citizen of Massachusetts.
- 4. Plaintiff, Killian Groshong-Galliher, a minor, is represented by Ivy Groshong-Galliher in her capacity as next friend and is a citizen of Massachusetts.
- 5. Defendant BELL TEXTRON, INC. ("BELL") is a corporation organized and existing under the laws of the State of Delaware with a principal place of business located at 3255 Bell Flight Blvd., Fort Worth, Texas 76118. The Bell Boeing V-22 Osprey aircraft that crashed and killed Jacob Galliher was jointly produced and manufactured by Bell and the Boeing Company, listed below, and was assembled at Bell's Texas facility.
- 6. Defendant THE BOEING COMPANY ("BOEING") is a corporation organized and existing under the laws of the State of Delaware with a principal place of business located at 929 Long Bridge Drive, Arlington, Virginia 22202, but doing business in the State of Texas. It may be served through its registered agent for service of process in Texas at Corporation Service Company, at 211 E. 7th Street, Suite 620, Austin, Texas 78701. The Bell Boeing V-22 Osprey aircraft that crashed and killed Jacob Galliher was jointly produced and manufactured by Bell and Boeing, and was assembled at Bell's Texas facility, with Boeing and Bell both supplying employees and overseeing portions of the manufacturing.
- 7. Defendant, UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC. ("UNIVERSAL STAINLESS") is a corporation organized and existing under the laws of Delaware with its principal place of business in Bridgeville, Pennsylvania. It defectively manufactured the metal

alloy for use in the gearbox of the Bell Boeing V-22 Osprey that crashed and killed Jacob Galliher and knew when it sold the alloy that it would be used by Bell and Boeing to construct the Osprey at Bell's Texas facility.

- 8. The alloy in question was manufactured at the Universal Stainless plant in Dunkirk, New York.
- 9. Plaintiffs, out of an abundance of caution, plead that, in the event they have misidentified any defendant, the Court apply the doctrine of misnomer, since Defendants maintain several different entities with similar names.

JURISDICTION AND VENUE

- 10. This Court has subject-matter jurisdiction under 28 U.S.C. § 1332(a)(2) because Plaintiffs and Defendants are completely diverse citizens of different U.S. states, and the amount in controversy exceeds \$75,000, excluding interest and costs.
- 11. Defendant Bell is deemed by law a citizen of Delaware where it incorporated and Texas where it maintains its principal place of business. Defendant Boeing is deemed by law a citizen of Delaware where it incorporated and Pennsylvania where it maintains its principal place of business. Defendant Universal Stainless is a citizen of Delaware where it incorporated and Pennsylvania where it maintains its principal place of business.
- 12. The Estate of Galliher, with Ivy Groshong-Galliher acting in her representative capacity, is deemed by law a citizen of Florida. Ivy Groshong-Galliher, in her personal capacity, Malcom Groshong-Galliher, and Killian Groshong-Galliher are all citizens of Massachusetts. As complete diversity exists between the parties and amount in controversy exceeds \$75,000, federal diversity jurisdiction exists.

- 13. This Court has personal jurisdiction over Bell, as Bell's principal place of business is in Texas and as Bell's actions in Texas substantially relate to the crash of the Bell Boeing V-22 Osprey at issue in this case. This Court likewise has personal jurisdiction over Boeing, as Boeing's actions in Texas as a co-manufacturer of the Bell Boeing V-22 Osprey substantially relate to the crash of the Bell Boeing V-22 Osprey at issue in this case. This Court likewise has personal jurisdiction over Universal Stainless, as it sold a defective alloy into the stream of commerce and knew or should have known it would be used during assembly at Bell's facility in Texas as a component of the Bell Boeing V-22 Osprey, leading to the crash at issue in this case.
- 14. Venue is proper in this district under 28 U.S.C. § 1391, as this is a judicial district in which a substantial part of the events or omissions giving rise to the claim occurred, or, in the alternative, at least one defendant is subject to personal jurisdiction in this district.

FACTUAL BACKGROUND

The Origins of the Bell Boeing V-22 Osprey

- 15. In April 1982, Bell collaborated with the then Boeing Rotorcraft Systems to form the Bell-Boeing partnership, which ultimately designed and developed the Bell Boeing V-22 Osprey, a tilt-rotor aircraft that combines vertical takeoff, hover, and landing qualities of a helicopter with the flight capabilities of a turboprop aircraft.
- 16. Boeing specifically manufactures and integrates the fuselage, cockpit, avionics, and flight-control systems of the Bell Boeing V-22 Osprey.
- 17. Bell's responsibility over the Bell Boeing V-22 Osprey consists of manufacturing and integrating the wing, transmissions, empennage, and rotor systems, as well as integrating the aircraft's Rolls-Royce engines.

- 18. The assembly point for all Bell Boeing V-22 Ospreys is at Bell's facility in the Northern District of Texas. The aircraft that is the subject of this suit was assembled at that location.
- 19. Both Bell and Boeing employees work on the assembly of the Bell Boeing V-22 Ospreys in the Northern District of Texas.
- 20. Historically, the first two Bell Boeing V-22 Ospreys were delivered in 2000 and the first operational Bell Boeing V-22 Osprey was delivered to the Air Force in January 2007.
- 21. The gearbox for the Bell Boeing V-22 Osprey contains five high-speed pinion gears and six low-speed pinions. These pinions are made from an alloy known as X-53, manufactured by United Stainless (and sometimes other vendors). This same metal is used in other high performance aircraft engines.
- 22. United Stainless provided the alloy that was used in creating the pinion gears on the aircraft that is the subject of this lawsuit. The alloy in question was made at the United Stainless facility in Dunkirk, New York.
- 23. Since the early 2000s, the Dunkirk manufacturing facility has been plagued by quality control problems a fact known to Bell and Boeing. The quality control issues are several, including but not limited to inclusions of aluminum oxide and manganese sulfide in the alloy, as well as carbide networks, resulting in the alloy becoming brittle and chipping more than would be expected when under stress, pressure, or torque.
- 24. These problems have been exacerbated by the fact that the equipment at the Dunkirk facility dates back to the 1950s, meaning that it is impossible to purchase original replacement parts for some of the machines that manufacture alloys at that facility. The aged equipment (combined with cost) precludes the application of more modern techniques in the manufacture of X-53 and other alloys.

25. The Dunkirk facility has also been plagued by management problems, with some employees reportedly complaining that the focus of United Stainless has been on profits, in the hope that high profits would lead to a buyout by a larger company.

26. Upon information and belief, United Stainless did not want to spend the money on more modern equipment at Dunkirk, for fear that the expense would make it less profitable or increase the expense of its product. Other, more modern, techniques of manufacturing are more expensive but can create alloys with higher purity; likewise, changing the amount and location of ingot selection in the manufacturing process can result in alloys with increasing or decreasing purity. In addition to problems with purity, the X-53 produced by Universal Stainless also contains carbide networks – a saturation of carbon – which increases wear resistance but makes the metal more brittle.

27. Indeed, other manufacturers of X-53 use a more modern technique of alloy production that results in an alloy with less inclusions and more purity, creating a more resilient metal and an alloy that limits the formation of carbide networks. Unfortunately, Bell and Boeing did not obtain alloy from these improved sources, and instead, pretended that the X-53 alloy from Universal Stainless was the equivalent of other manufacturers, claiming that they could detect no meaningful difference with the competitor alloys. In other words, Bell and Boeing knew that the more modern alloy systems tried to remove inclusions in the alloy or prevent carbide networks, but Bell and Boeing claimed that because Bell and Boeing could not measure the difference in the alloys once created, the Universal Stainless alloys were equivalent.

28. In 2014, Bell and Boeing gave the U.S. Government a risk report about the Universal Stainless alloy, which tried to downplay its problems. The U.S. Government was not amused and implemented "contractual financial withholds" so that Universal Stainless would take corrective

action. Universal Stainless, however, made no attempt to correct those deficiencies, apparently because it was not cost effective to do so – much like an automobile manufacturer who finds it "not cost effective" to relocate the location of a gas tank on a car, claiming that the saved lives will not justify the loss of profits. Bell and Boeing kept buying the X-53 alloy from Universal Stainless, even though they knew other manufacturers, using other manufacturing methods, would produce a less-impure alloy consistent with the Bell Boeing V-22 Osprey's needs.

- 29. In any event, United Stainless was the principal supplier of X-53 to Boeing, which used the alloy not only in the Bell Boeing V-22 Osprey, but also in several other types of aircraft. Both Bell and Boeing knew of the manufacturing problems at the Dunkirk facility and of the problems with the alloy offered, but they elected to use the alloy to make the pinions for the Bell Boeing V-22 Osprey at issue in this case.
- 30. Bell and Boeing went out of their way to try to show that the failure of the X-53 due to non-metallic inclusions would not significantly increase the risk of a crash. In 2014, they produced a safety analysis for the U.S. government, admitting that if the gearbox failed due to an inclusion it could clearly lead to a catastrophic loss. However, Bell and Boeing argued, the probability of a gear failure depended on how often the metal failed (estimated from historical data) and the volume of metal in the critical gears (available by simply weighing the metal).
- 31. When these two factors are multiplied together, it created a risk factor that was too high something greater than one event per million flight hours. To lower the risk factor that would be reported, the Bell and Boeing engineers applied an *ad hoc* adjustment a guess, made with minimal evidence that there was only a 50% chance that an alloy failure would result in an imminent crash. With this new fudge factor, the risk of loss came to a barely acceptable range between one event per 10 million flight hours and one event per million flight hours a "remote"

risk. A risk higher than "remote" would have required an immediate escalation of the risk report to all branches using the Bell Boeing V-22 Osprey, but, by keeping the published risk low, Bell, Boeing, and Universal Stainless escaped further review.

- 32. Each gearbox on the Bell Boeing V-22 Osprey has chip detectors, used to detect ferrous particles (as from a piece of a pinion gear or bearing that shears off during operation and falling into the gearbox).
- 33. The chip detectors are monitored by the Drive System Interface Unit, which announces when conductive debris is captured at the detector electrodes. The chip detectors have the capability to burn off debris by passing electrical current through the electrodes. When conducive materials make contact with the magnetic sensor pickup, the chip burn circuit automatically activates and attempts to burn off the debris, and a chip burn advisory light on the aircraft's central display illuminates, remaining on until an airman pushes an acknowledgement button. If three attempts to burn off the same chip occur and fail, a PRGB CHIPS alert illuminates and an auditory alert sounds.
- 34. The chip detectors and Drive System Interface Unit were designed, in the event of multiple hits on the chip detectors, for the Bell Boeing V-22 Osprey to issue an alert that the chip detection system has failed. The system thus indicates that if it gets too many positive results, it is malfunctioning failing to report the possibility of multiple hits.
- 35. According to Bell and Boeing's guidance in 2023, if there are three chip alerts that occur during an uninterrupted flight, the pilot should land "as soon as practical." In such a case, the landing site and duration of flight is at the discretion of the pilot-in-command, considering factors such as threat, remote location, local repair capability, practicality of maintenance recovery team launch, remaining aircraft system redundancy, mutual support, or other relevant factors.

- 36. According to Bell and Boeing's guidance in 2023, if the PRGB CHIPS alert sounds, the pilot should land as soon as possible. When flying over water, the determination of landing as soon as possible is at the discretion of the pilot, with factors such as sea state, weather, communication, survival equipment, and the location of other aircraft, ships, and land will assist the pilot in deciding whether to land as soon as possible or to proceed to a point where survival and rescue are enhanced.
- 37. Ongoing problems with the Bell Boeing V-22 Osprey, including crashes involving the failure of the clutch systems, caused the U.S. military to demand additional safety assessments from Bell and Boeing. In 2020 and 2022, Bell and Boeing did produce a new safety assessment, attempting to better quantify the risks the pilots and crew of the Bell Boeing V-22 Osprey endured when flying over the ocean. These reports initially concluded that Marine and Air Force Ospreys would spend 20% of their time over the ocean, while Navy craft would spend around 80% of their time over water. This led to an expected rate of catastrophic failures to be 1 in 100,000.
- 38. This expected catastrophe rate caused a vexing problem for Bell and Boeing. They knew that the Department of Defense in 2020 required that representatives from all the various branches must provide formal agreement before accepting any equipment designated a serious or high risk. If Bell and Boeing continued to report a catastrophic risk so high, then the Bell Boeing V-22 Osprey would be forced to be re-evaluated by the Marines, the Navy and the Air Force separately, and each branch could demand its own specialized method of mitigation.
- 39. Bell and Boeing responded quickly. In 2022, they put out a new risk assessment, stating that only 10% of the time would Air Force V-22s operate over water and that Navy V-22s would only operate over water 40% of the time. Using this revised math changed the risk assessment of

alloy failure down to a medium risk, not a serious risk. With the lower numbers, no review was required of the Bell Boeing V-22 Osprey.

- 40. The U.S. military relied on Bell and Boeing to give a fair safety assessment of the risks associated with the United Stainless alloy. By finding *ad hoc* ways to depress the reported risk, Bell and Boeing hid the problems associated with the Bell Boeing V-22 Osprey's gearbox due to substandard alloy, interfering with the ability of the branches of the U.S. military to properly assess the risk. In the end, there was nothing moderate about the risk posed by the Bell Boeing V-22 Osprey flying with a flawed alloy the question instead became when would the failure strike, and would the failure be lethal.
- 41. According to Bell and Boeing's guidance in 2023, if there are abnormal secondary indications after a PRGB CHIPS alert (such as vibration or erratic behavior) the pilot should land immediately, including ditching if flying over water. Of course, this assumes that the pilot does not receive a CHIP DETERCTOR FAIL advisory, which indicates that the chip detection system itself has failed. Further, Bell and Boeing had misrepresented the risk associated with the failure of an alloy and what that failure might look like, making it impossible to construct an adequate warning system for the pilots.

The Crash of GUNDAM 22

- 42. On November 29, 2023, Staff Sgt. Galliher was sent on an operation wherein he travelled on a Bell Boeing V-22 Osprey known as GUNDAM 22 as a Direct Support Operator, providing critical field intelligence for a flight over the waters between Japan and China.
- 43. Staff Sgt. Galliher was a specialist in Mandarin Chinese, and he had been specifically requested for this mission. He otherwise would have been on paternity leave.

- 44. The mission was to fly from Yokota Air Base, Japan, proceed overwater to Marine Corps Air Station Iwakuni, Japan, then fly overwater towards Okinawa for approximately three hours with an in-flight refueling, then land at Kadena Air Base, refuel, and return to Yokota. The first portion of the mission flying overland to Iwakuni, saw no problems.
- 45. However, approximately 40 minutes into flying overwater, GUNDAM 22 suffered its first chip burn advisory. The advisory was acknowledged, and the mission went on, but, thirteen seconds later, the GUNDAM 22 experienced its second chip burn advisory, which was also acknowledged. Unknown to the crew, the pinions had begun to break apart, presumably because the alloy was flawed.
- 46. Twelve minutes later, the third chip burn alert illuminated, indicating that there was yet another chip in the left gearbox. The pilots of GUNDAM 22 were now in a "land as soon as practicable" status, but, the pilot, considering remote location, local repair capability, practicality of maintenance recovery team launch, remaining aircraft system redundancy, mutual support, and other factors, elected to continue the mission. Five minutes later, the pilots received a fourth chip burn advisory, and ten minutes later, a fifth chip burn advisory.
- 47. The pilots and crew tried to figure out why the chip burn advisory was flickering on and off during this period. They did not know they could not know that the pinion with the faulty alloy was slowly disintegrating, filling the gearbox with chips and progressively destroying the gearbox. Other than the chip burn alert lighting, there was no sign of additional problems with the aircraft.
- 48. Ten minutes later, the PRGB CHIPS caution posted. The pilot scrubbed the mission, and turned the plane towards Yakushima airport, their closest planned divert field. The plane was now in a 'land as soon as possible' status, but, as GUNDAM 22 was over water, the determination

of where to land was left at the discretion of the pilot. Looking at the ocean, communication, and the location of other aircraft and ships, the pilot decided that the best place to land was Yakushima, a mere 11 minutes away with a landing strip.

- 49. As GUNDAM 22 approached Yakushima, a new alert went off the CHIP DETERCTOR FAIL advisory, indicating that the chip detector itself was not working. The pilot commented that he was no longer worried, because it looked to him like the previous warnings had been due to a faulty chip detector. Believing he no longer faced an emergency, the pilot directed his plane to perform "one more big right hand loop and come in and just set up for a landing." The CHIP DETERCTOR FAIL advisory had been misleading the detector failed because it was so full of metal chips from the shredded pinion that it could detect nothing further.
- 50. Thinking that the chip detector system had failed due to the CHIP DETECTOR FAIL advisory given, the pilot converted from airline mode to helicopter for landing, putting additional stress on the gearbox. As that conversion to helicopter mode progressed, the increase in torque ripped apart the pinion with the faulty alloy, shredding it and destroying the gearbox. The left propeller, unable to provide any torque or lift, turned uselessly, and the GUNDAM 22 flipped over and spun into the sea, killing everyone aboard.
- 51. Reviewing the crash, Air Force Lt. General Conley stated that safety assessments were "inadequately communicated to the military services," creating a "lack of comprehensive awareness of risks and limiting opportunities to impose risk mitigation measures at the service of the unit level." If Bell or Boeing had given sufficient warnings to the military about what it meant when a chip detector system failed, the pilot would have made different decisions, and the crash that killed Staff Sgt. Jacob Galliher would not have occurred. Of course, doing so would have meant that Bell and Boeing also would have had to adequately report the risks of an alloy failure,

which would have meant reporting the risk factors without fudging the numbers using *ad hoc* guesses and calculations to improperly deflate the reported figures.

- 52. Moreover, Bell and Boeing knew or should have known that the alloy used to make the pinions was insufficiently pure, such that the risk of one of them disintegrating was obvious. Indeed, the Navy had previously implemented contractual financial withholds prior to the 2023 crash to try to force the defendants to correct deficiencies in the alloy processing. Defendants, however, took no corrective actions, nor did they seek out alloys from more expensive sources that were made with more modern processes.
- 53. Indeed, at least one former Universal Stainless employee has citied outmoded equipment at Universal Stainless as an explanation for its quality control problems.

CAUSES OF ACTION

I. NEGLIGENCE AND GROSS NEGLIGENCE IN MANUFACTURING METAL ALLOY

- 54. Plaintiffs restate Paragraphs 1 53 as if fully set forth herein.
- 55. United Stainless had a duty to manufacture the alloy used in GUNDAM 22 in an appropriate manner. It breached this duty, resulting in the pinions made of the alloy in GUNDAM 22 disintegrating during flight, proximately causing the crash at issue and resulting in damages for which Plaintiffs now sue.
- 56. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against Universal Stainless, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.
- 57. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death, on behalf of all the parties entitled to

recover, seeking damages for mental anguish, pecuniary loss, loss of companionship, society, and consortium, loss of household services, loss of inheritance, funeral expenses reimbursable, and exemplary damages.

II. NEGLIGENCE AND GROSS NEGLIGENCE IN MANUFACTURING PINIONS

- 58. Plaintiffs restate Paragraphs 1 57 as if fully set forth herein.
- 59. Bell and/or Boeing had a duty to use proper care when manufacturing the pinions that went into GUNDAM 22, including but not limited to using appropriate alloys to manufacture the pinions and make sure the pinion were formed properly. Bell and/or Boeing failed to do so, and particularly, used alloy to manufacture the pinions that it knew or should have known had design defects, which either alone or in combination with improper clutch design would cause a crash Bell and/or Boeing breached this duty, resulting in the pinions of GUNDAM 22 disintegrating during flight, either alone or with improper clutch design proximately causing the crash at issue and resulting in damages.
- 60. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against Bell and/or Boeing, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.
- 61. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death against Bell and/or Boeing, on behalf of all the parties entitled to recover, seeking damages for mental anguish, pecuniary loss, loss of companionship, society, and consortium, loss of household services, loss of inheritance, funeral expenses reimbursable, and exemplary damages.

III. NEGLIGENCE AND GROSS NEGLIGENCE IN MANUFACTURING AND AVIONICS

- 62. Plaintiffs restate Paragraphs 1 61 as if fully set forth herein.
- 63. Bell and/or Boeing had a duty to use proper care when procuring the metal that would be used to manufacture the pinions that went into GUNDAM 22, which included using appropriate alloys to manufacture the pinions. Bell and/or Boeing failed to do so: It chose to use a supplier of the alloy for the metal which Bell and/or Boeing knew or should have known had design defects and was manufactured in an outdated facility, using techniques that were out-of-date and not state of the art. Bell and/or Boeing breached its duty, resulting in the pinions of GUNDAM 22 disintegrating during flight, proximately causing the crash at issue and resulting in damages, thereby participating the events that led to the manufacturing defect that caused this crash.
- 64. In addition, Bell and/or Boeing manufactured avionics for GUNDAM 22 which erroneously reported that a chip detector had failed and was giving false reports of chips in a gearbox when the chip detector, in fact, had recorded so many chips in a gearbox that it was unable to clear those chips. This is much like having a smoke detector that indicates it is malfunctioning if it detects too much smoke it makes persons hearing the smoke alarm discount or ignore its warning because the malfunction alert erroneously indicates that the detector is not working. They further negligently advised regarding the risks associated with the failure of a gear or the existence of chips as shrapnel from a failed gear due to an improper alloy.
- 65. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against Bell and/or Boeing, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.
- 66. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death against Bell and/or Boeing on behalf of all

the parties entitled to recover, seeking damages for mental anguish, pecuniary loss, loss of companionship, society, and consortium, loss of household services, loss of inheritance, funeral expenses reimbursable, and exemplary damages.

IV. NEGLIGENCE AND GROSS NEGLIGENCE IN DESIGN OF GEARBOX

- 67. Plaintiffs restate Paragraphs 1 66 as if fully set forth herein.
- 68. Bell and/or Boeing had a duty to design its pinions and gearbox for the Bell Boeing V-22 Osprey to satisfy the requirements of the aircraft for flight. While it may claim to have relied on government specifications, either the government did not provide precise specifications for the development of the avionics, or alternatively, the avionics designed did not meet government specifications that had been provided.
- 69. Bell and/or Boeing further failed to adequately warn the United States about dangers of which the United States was not aware, and, to the extent it gave warnings, it manipulated its disclosures to vastly underplay those dangers, thereby hindering studies on the resolution of those problems, including but not limited to how to obtain better alloy for the pinions in the gearbox and how to better manufacture these pinions.
- 70. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against Bell and/or Boeing, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.
- 71. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death against Bell and/or Boeing, on behalf of all the parties entitled to recover, seeking damages for mental anguish, pecuniary loss, loss of

companionship, society, and consortium, loss of household services, loss of inheritance, funeral expenses reimbursable, and exemplary damages.

V. NEGLIGENCE AND GROSS NEGLIGENCE IN DESIGN OF AVIONICS

- 72. Plaintiffs restate Paragraphs 1 71 as if fully set forth herein.
- 73. Bell and/or Boeing had a duty to design its avionics for the Bell Boeing V-22 Osprey to satisfy the requirements of the aircraft for flight. While it may claim to have relied on government specifications, either the government did not provide precise specifications for the development of the gearbox, or alternatively, the avionics designed did not meet government specifications that had been provided.
- 74. Bell and/or Boeing further failed to adequately warn the United States about dangers the United States was not aware of, and, to the extent it gave warnings, it manipulated its disclosures to vastly underplay those dangers, thereby hindering studies on the resolution of those dangers. For example, and not by way of limitation, Bell and/or Boeing failed to tell the government that the chip detection system would report that the chip detectors were malfunctioning if the chip detection system detected too many chips, meaning that pilots would think the chip detection alerts were false based on the malfunction indicator lighting, when, in fact, the chip detector simply had been overwhelmed by the amount of chips in the gearbox.
- 75. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against Bell and/or Boeing, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages.
- 76. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death against Bell and/or Boeing, seeking

damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.

VI. MANUFACTURING DEFECT PRODUCT LIABILITY - UNITED STAINLESS

77. Plaintiffs restate Paragraphs 1 - 76 as if fully set forth herein.

78. United Stainless produced an alloy for use in the Bell Boeing V-22 Osprey, which was supposed to be capable of handling the stresses associated with the pinions operating in the gearbox but was defective because it contained too many inclusions and/or carbide networks, which weakened and/or embrittled the metal. This defect existed at the time when it sold the alloy to Bell and or Boeing and could have been avoided by other manufacturing techniques. The failure to provide the proper alloy made the alloy unreasonably dangerous. The defect in the alloy was a producing cause of the airplane crash that is the subject of this suit. United Stainless knew or should have known of this manufacturing defect in its alloy.

79. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against Universal Stainless, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages.

80. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death against Universal Stainless, on behalf of all the parties entitled to recover, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.

VII. MANUFACTURING DEFECT PRODUCT LIABILITY -- BELL and/or BOEING

81. Plaintiffs restate Paragraphs 1 - 80 as if fully set forth herein.

- 82. Bell and/or Boeing produced the pinions used in the Bell Boeing V-22 Osprey which were supposed to be capable of handling the pressures associated with operation of the aircraft, but they were defective and cracked under pressure. This defect existed at the time when it sold the aircraft to the U.S. Government. The failure to provide the proper pinions made the aircraft unreasonably dangerous. The defect in the pinions was a producing cause of the airplane crash that is the subject of this suit. Bell and/or Boeing knew or should have known of this manufacturing defect.
- 83. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against Bell and/or Boeing, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages.
- 84. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death against Bell and/or Boeing, on behalf of all the parties entitled to recover, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.

VIII. MANUFACTURING DEFECT PRODUCT LIABILITY -- BELL and/or BOEING

- 85. Plaintiffs restate Paragraphs 1 84 as if fully set forth herein.
- 86. Bell and/or Boeing produced the avionics used in the Bell Boeing V-22 Osprey which were supposed to be capable of handling chip detection in the Bell Boeing V-22 Osprey, but, in fact, would indicate to the pilot of the aircraft that the chip detector had malfunctioned if it detected too many chips. The failure of Boeing and/or Bell to provide proper avionics and/or to improperly advise as to the magnitude of the risks associated with the pinions made the aircraft unreasonably

dangerous. The defect in the pinions was a producing cause of the airplane crash that is the subject of this suit. Boeing and/or Bell should have known of this defect.

87. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against Boeing and/or Bell, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages.

88. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death against Bell and/or Boeing, on behalf of all the parties entitled to recover, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.

IX. PRODUCT LIABILITY FAILURE TO WARN AGAINST BELL and BOEING

89. Plaintiffs restate Paragraphs 1 - 88 as if fully set forth herein.

90. The Bell Boeing V-22 Osprey is an aircraft with inherent risks of use that may arise from the intended or reasonably anticipated use of the aircraft. Bell and Boeing, as joint manufacturers, knew of this risk and could foresee the risk of chips forming in the gearbox. Despite their knowledge, they did not warn the purchaser of the aircraft that, if the chip detectors detected too many chips in the gearbox of the aircraft, the chip detector would display an indicator that the chip detection system had failed. Indeed, they underplayed the risks associated with the pinions disintegrating so that the military would not review the viability of the Bell Boeing V-22 Osprey. As a result, they did not tell the purchaser or the pilots of the purchaser that if the chip detector failed, it meant that there were too many chips to count in the gearbox and the gearbox would fail. The failure to warn created a causative nexus with the death of the crew of GUNDAM 22.

- 91. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against Bell and/or Boeing, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages.
- 92. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death against Bell and/or Boeing, on behalf of all the parties entitled to recover, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.

X. PRODUCT LIABILITY DESIGN DEFECT AGAINST UNITED STAINLESS

- 93. Plaintiffs restate Paragraphs 1 92 as if fully set forth herein.
- 94. United Stainless designed the alloy, which was used for the pinions in GUNDAM 22. This alloy, as designed, was unreasonably dangerous, in that it could have too many inclusions, rendering parts of the alloy unduly brittle. There are alternative designs that could resolve this problem, using additional refinement of the metal. The defects in the way the alloy was designed was a producing cause of the injuries at issue in this case. United Stainless knew or should have known of these design defects.
- 95. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against United Stainless, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages.
- 96. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death against United Stainless, on behalf of all

the parties entitled to recover, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.

XI. PRODUCT LIABILITY DESIGN DEFECT AGAINST BELL AND BOEING

- 97. Plaintiffs restate Paragraphs 1 96 as if fully set forth herein.
- 98. Bell and Boeing designed and built the Bell Boeing V-22 Osprey, which, as designed, is unreasonably dangerous, in at least two regards. First, the pinions used in the gearbox are made of a material, which chips unduly, which can cause the gearbox to fail and results in an abrupt loss of power. Second, the alarm system which might warn the pilots of a gearbox failure indicate, if the gearbox is in the process of failing, that the chip detection system has failed thereby preventing the pilot from taking necessary actions to save the aircraft and secure the passengers and himself.
- 99. There are safer designs. The pinions could have been made from a better alloy that does not chip to the degree of the current alloy or is treated differently to resist chipping. The chip detection system could inform the pilots that it had detected so many chips that the pinions were shredding in the gearbox, rather than simply indicating that the chip detector had failed. The defects in the manufacturing, combined with Bell and Boeing failing to warn of the risks associated with the Bell Boeing V-22 Osprey being operated with deficient alloy in its gearbox, were a producing cause of the injuries at issue in this case.
- 100. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against Bell and/or Boeing, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages.

101. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death against Bell and/or Boeing, on behalf of all the parties entitled to recover, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.

XII. RES IPSA LOQUITOR NEGLIGENCE AGAINST BELL AND BOEING

- 102. Plaintiffs restate Paragraphs 1 101 as if fully set forth herein.
- 103. Bell and Boeing designed and built the Bell Boeing V-22 Osprey that crashed into the sea immediately off Japan in November 2023 after its gearbox shredded, its high speed pinion cracked and broke.
- 104. In the alternative to those causes set forth above, Plaintiffs plead that under the doctrine of *res ipsa loquitor*, even if they do not identify the specific cause of the crash, the negligence of the manufacturers and their liability for building a defective product speaks for itself.
- 105. Plaintiff Ivy Groshong-Galliher, as the representative of the Estate of Galliher, brings an action under the Texas Survival Statute for wrongful death against Bell and Boeing, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages.

106. Plaintiff Ivy Groshong-Galliher, as spouse of the decedent and as representative of the Estate of Galliher, brings an action for wrongful death against Bell and Boeing, on behalf of all the parties entitled to recover, seeking damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, funeral expenses, and exemplary damages for the injuries to Staff Sgt. Galliher.

JURY DEMAND

107. Plaintiffs demand a jury.

PRAYER

Wherefore, premises considered, Plaintiffs request that, after jury trial, judgment be entered in their favor, and they be awarded damages for pain and suffering of the decedent, mental anguish of the decedent, pecuniary loss, pecuniary loss, loss of companionship, society, and consortium, loss of household services, funeral expenses, and exemplary damages, and that, as to the wrongful death claims, the jury allocate the wrongful death damages among all eligible persons per the Texas Civil Practice and Remedies Code.

Respectfully submitted,

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