

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLORADO  
EASTERN DIVISION**

Civil Action No. 1:26-cv-00274-SB

JUSTIN MABIE

Plaintiff,

v.

UNIVERSITY OF COLORADO,

Defendant.

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**First Amended Complaint**

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NOW COMES the Plaintiff, JUSTIN MABIE (“Plaintiff”), by and through his attorneys, Blake Horwitz, Esq. of BLAKE HORWITZ LAW FIRM, and Nicole Pearson, Esq. of FACTS LAW TRUTH JUSTICE, A.P.C., and hereby alleges as follows in his First Amended Complaint:

**Introduction**

1. The proper retention of historical weather data is essential for the United States, foreign governments, the United Nations and private enterprise. It is from this information that long and short-term decisions can be made with regard to weather and climate change.

2. The greatest collection of historical weather data is managed and retained by NOAA (“National Oceanic and Atmospheric Administration”).

3. Unfortunately, said management has been taken over by individuals who seek to alter and/or destroy historical and contemporary weather records so as to allow the United States

and foreign governments, as well as private actors, to re-create (manufacture) a historical weather narrative.

4. By failing to retain, protect, and otherwise destroying and manipulating historical weather data, future decisions can be made by governments and private enterprises that are convenient to political aspirations, rather than legitimate scientific findings.

5. In the scientific community, conclusions are derived, and decisions are made, through the application of established scientific methods to empirical data, the integrity of which depends on proper collection, preservation, and transparency.

6. Historical data must be accurately recorded and preserved to ensure that decisions are grounded in reliable evidence. Weather history is no exception. If historical weather data is manipulated to create a convenient narrative, the manner in which Earth's weather is managed and manipulated by the United States government, foreign governments, and private actors can be derived from political motivations and special interests versus legitimate science. This is occurring today.

7. Plaintiff was the chief steward<sup>1</sup> for significant categories of historical weather data (ranging from the mid 19<sup>th</sup> century to the end of the 20<sup>th</sup> century) for the United States Government and the United Nations. This data is no longer being stored and maintained in a proper fashion. In fact, large amounts of data have been destroyed and are not being properly recorded, stored, or made available to scientific researchers.

8. Plaintiff blew the whistle on these irregularities and, as a consequence, experienced retaliation, up to and including termination of his employment by Defendant.

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<sup>1</sup> A "steward" in this context concerns the proper retention, interpretation, sharing and management of weather and climate records. *See also* 15 CFR § 950.5.

9. Plaintiff also blew the whistle to NOAA and members of the United States military regarding potential espionage and filed a federal lawsuit. As a consequence, he experienced retaliation, up to and including termination of his employment by Defendant.

10. For these, and other reasons, Plaintiff has filed the instant action.

### **JURISDICTION**

11. This Court has subject-matter jurisdiction under 28 U.S.C. § 1331 as this action arises under federal law, including, 41 U.S.C. § 4712.

12. Venue is proper in this District under 28 U.S.C. § 1391(e)(1) as the Defendant is located in this District and the transactions and occurrences took place in this district.

### **EXHAUSTION OF ADMINISTRATIVE REMEDIES**

13. Plaintiff has exhausted administrative remedies for the allegations set forth herein through the Office of Inspector General, Office of Investigations (“Investigation”), and consequently filed the instant action pursuant to 41 U.S.C. *sec.* 1471 for a *de novo* action in this District Court.

14. The report of the investigation, which was concluded on November 20, 2024, included, but was not limited to, the following:

- a. a 2018 whistleblower report referable to the destruction of federal records;
- b. an OIG report in 2018 regarding the destruction of federal records;
- c. a 2021 whistleblower report of suspected espionage;
- d. the October 2021 filing of a federal lawsuit by Plaintiff;
- e. an August 2021 letter drafted by Waleed Abdalati;
- f. a February 2, 2023, termination letter, drafted by Massimo Ruzzene;
- g. other matters found within the report.

15. The OIG report contains many incorrect conclusions and factual representations.

## FACTUAL ALLEGATIONS

### Plaintiff's Background

16. Plaintiff, Dr. Justin Mabie, holds a Doctorate of Atmosphere and Ocean Sciences which focused on multi-disciplinary atmospheric physics including geomagnetism, measuring ionosphere plasma and motions using ionosondes.<sup>2</sup>

17. Plaintiff is an atmospheric scientist,<sup>3</sup> focusing on space plasma, physics, geophysics and electromagnetism. He obtained his degree in Atmosphere and Ocean Sciences at the University of Colorado, Boulder.

18. From approximately 2008 until 2019, Plaintiff served as the program leader for NOAA'S World Data Center A (WDC-A)<sup>4</sup> for geomagnetism.

19. Plaintiff was also the *de facto* chief steward of significant historical weather data maintained by the WDC-A, providing stewardship for the United States and the United Nations.

20. Through his research, among other things, Plaintiff became an expert in analyzing the Earth's upper atmosphere.

21. Plaintiff, at all relevant times, resides in Golden, Colorado.

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<sup>2</sup> The ionosonde and geomagnetism programs involved a weather radar system (ionosonde) and the extent to which the Earth's magnetic compass changes over time (geomagnetism).

<sup>3</sup> Space science is a multidisciplinary study, integrating, physics, chemistry, geology, biology, and engineering to explore, *inter alia*, weather, weather forecasting, climate monitoring, GPS, planets, celestial objects and satellite communications.

<sup>4</sup> The World Data Center for Solar Terrestrial Physics (WDC-A) was developed in the 1950's in order to steward environmental/weather data with the Soviet Union and other nations. WDC-A had a stewardship function for all weather data. 15 C.F.R. § 950.5.

**Defendant University of Colorado, Boulder,  
“CIRES” and Other Relevant Actors**

22. Defendant operates CIRES—the Cooperative Institute for Research and Environmental Sciences—at Boulder.

23. NOAA is an agency of the United States Federal Government within the Department of Commerce that, *inter alia*, tracks weather, provides forecasts, and retains historical weather data.

24. At all relevant times, CIRES was a formal, federally funded partnership with NOAA, consisting of University and NOAA researchers and scientists who conduct research and develop models of, *inter alia*, the Earth’s upper and lower atmosphere, and scientific analyses of intervention of Earth’s weather and climate, including geoengineering and weather modification.

25. NOAA and CIRES together, through their agents, conducted, *inter alia*, weather and climate research of the global, regional and local environments from the Department of Commerce David Scaggs Research Center in Boulder, Colorado.

26. Specifically, CIRES and NOAA, both working in collaboration, engaged in environmental research for the United States in the form of:

- a. data collection to ascertain climate change;
- b. data collection to ascertain air temperature and water pollution;
- c. data collection to evaluate water pollution;
- d. data collection of the upper atmosphere;
- e. researched techniques in the intervention in weather modification and climate change; and
- f. determined which governmental projects should be funded.

27. CIRES is a grantee and/or subgrantee of NOAA within the meaning of 41 U.S.C. *sec.* 4712.

28. At all relevant times, Eric Kihn was either the Deputy Director and/or acting Director of the National Geophysical Data Center (NGDC) with NOAA.

29. At all relevant times, William (“Bill”) Denig was the Division Chief of the Solar and Terrestrial Physics Division for NOAA.

30. At all relevant times, Sue McLean was the Division for the Marine Geology and Geophysics division (MGG) of NOAA.

31. At all relevant times, Dr. Terence Bullet, was a CIRES research associate and had a degree in electrical engineering and Radar Systems Engineering from the University of Massachusetts, Lowell, and was a CIRES research associate.

32. At all relevant times, Waleed Abdalati was the director of CIRES.

33. At all relevant times, Massimo Ruzzene was a senior member of university leadership.

34. At all relevant times, Connie Slusser, a NOAA employee was a manager of the warehouse where the historical weather documents were stored.

#### **Scope of Plaintiff’s Employment**

35. As a CIRES employee working at NOAA, Plaintiff:

- a. took orders from federal employees and their agents;
- b. supervised federal employees and their agents;
- c. was the chief steward of historical data on behalf of the United States and the United Nations;
- d. managed NOAA researchers and contractors with regard to the retention and interpretation of historical weather data;

- e. made ultimate decisions relative to historical weather data;
- f. was the individual in charge of the preservation of the historical data as well as the interrelationship between and interpretation of that data;
- g. stewarded historical weather data from approximately 2007 to 2023.

### **Preserving Historical Weather Data**

36. The maintenance of historical weather data is complex. It not only requires the safe retention of data, but interpretation of said data as it was collected at that time, using contemporaneous methods and collateral data which varied over time, based on the then-existing science.

37. For example, if a weather data point was created at a specific point in time with a specific tool, the historical data steward would need to possess an understanding of that tool in order to interpret the data. Additionally, any and all accompanying collateral data necessary to interpret that data would had to have been retained for interpretation.

38. The organization of documents is essential so that a proper interpretation of historical weather evidence can take place. If, for example, documents are separated from each other, they lose their value as a method of interpreting the then existing body of weather evidence.

39. Weather data also exists in the form of charts, analog records, microfilm and other images. All of this data must also be organized and maintained in a specific manner so as not to lose its relevance, and in order to accurately interpret contemporaneous data.

40. This method of interpretation of historical weather data has evolved over time based on the then-existing science, tools, resources, and processes.

### **Significance of Preserving Historical Weather Data**

41. Decisions by the United States, United Nations, foreign governments, and private enterprises regarding “climate change” and “global warming” are being made—today— based upon historical weather data, such as and including the data that was maintained by Plaintiff.

42. The analysis of climate change and/or global warming also has a profound effect on manufacturing and the world economy.

43. The proper retention of historical weather data is essential for the United States, foreign governments, the United Nations and private enterprise. Long and short-term decisions are made regarding agriculture, food security, disaster preparedness, infrastructure, energy production and distribution, public health protection, national security assessments, the formulation of global and domestic environmental and economic policies, and weather derivatives.

44. Inhibiting the proper interpretation of historical weather data prohibits a correct assessment of climate change/global warming and thus distorts the ultimate scientific analysis, which, in turn, effects global policies, as set forth immediately above.

45. Federal law, including but not limited to 44 U.S.C. § 3101 *et seq.*, establishes a clear framework governing the preservation of agency records. Under the Federal Records Act, specifically, federal agencies must create, maintain, and safeguard records, documenting these activities and protecting these records from unauthorized destruction. Federal records may only be disposed of with approval from the Archivist of the United States. Any unauthorized destruction violates federal law and triggers a duty to report and remediate the loss.

46. Similarly, NOAA’s internal policies reinforce these obligations in the specific context of environmental and scientific data. NOAA Administrative Order 212-15 requires the preservation, integrity, accessibility, and long-term stewardship of such data, while NOAA’s

Scientific Integrity Policy prohibits data manipulation, suppression, or destruction and requires that it remain complete and reproducible.

47. Together, these authorities establish a non-discretionary rule: environmental and scientific data are national assets that must be preserved intact to ensure transparency, scientific validity, and informed decision-making, and may not be altered, discarded, or destroyed outside authorized processes.

**Defendant Authorizes the Destruction of Protected Historical Weather Data**

48. From 2015 to 2018, the Plaintiff became aware that employees and/or agents of NOAA and CIRES were mismanaging, failing to protect, and destroying historical weather data he was in charge of maintaining.

49. This destruction/mismanagement prevented and continues to prevent a proper interpretation of historical records, which, in turn, has and continues to cause an incorrect analysis of climate change and global warming principles.

50. In 2015, Eric Kihn ordered Bill Denig and Sue McLean to remove and destroy historical weather records located in Boulder, Colorado, in violation of the Federal Records Act, 44 U.S.C. §§ 3101, 3105, and 3106, and 44 U.S.C. § 2107. This directive also violated NOAA requirements, including NAO 212-15 and NOAA's Scientific Integrity Policy, which prohibit the destruction or suppression of environmental and scientific data.

51. Decades of historical weather data was destroyed.

52. Such conduct constituted an unlawful destruction of federal records and a gross waste of abuse of authority, in violation of law 41 U.S.C. § 4712.

53. After the 2015 data destruction, Plaintiff and NOAA employee, Dave Fischman, generated a “White Paper” identifying the risks and concerns regarding the selective destruction of historical weather data.

54. The White Paper was shared with Eric Kihn, Bill Denig, and Connie Slusser.

55. In or around 2016 - 2017, Eric Kihn, ordered historical weather data to be boxed up from where it was stored in a warehouse located in Boulder, Colorado.

56. These materials, comprising over 200,000 cubic feet of materials (collateral evidence, contemporaneous instruments and data) was to be disorganized from its preserved state and, in violation of the Federal Records Act, shipped to Asheville, North Carolina. This process would result in the destruction of essential climate data records.

57. On or around June 2018, Plaintiff was notified by NOAA employee, Karen Horan, that NOAA was moving forward with this large data migration against Plaintiff’s recommendations.

58. Upon receiving this information, Plaintiff reported his concerns regarding the destruction of documents (as he had done previously in 2015) to his NOAA supervisors and Bill Denig, Eric Kihn, Jason Cooper, Scott Hausman, and Kelly Prendergast.

59. Specifically, Plaintiff sent an email to Eric Kihn to request that he be involved in the transfer of historical records so that he could ensure the proper organization and transfer in order to help prevent destruction of same.

60. Even though Plaintiff objected to the transfer, he believed that his involvement would cause some level of document preservation, which was essential to proper stewardship and the historical preservation of weather data.

61. Kihn responded by ordering retaliation against Plaintiff, including ordering CIRES researcher, Juan Rodriquez, to threaten Plaintiff.

62. Ultimately, Plaintiff was allowed to cooperate in the transfer of some of the data. A portion of the data Plaintiff organized, was properly sent to North Carolina. The larger balance of data was chaotically placed in boxes in a disorganized fashion, destroying its relevance, by separating it from accompanying contemporaneous data and transferred over to the storage facility where it was managed by an individual who is neither educated in historical weather data stewardship, nor a subject matter expert. The records have also become inaccessible to scientists for further investigation.

63. In response to Plaintiff's protests as to the destruction of historical weather data assertions and federal records amounting to waste, fraud and abuse, Defendant, in conjunction with and with the knowledge of NOAA actor, Eric Kihn, and CIRES/University employees/agents Juan Rodriguez, Waleed Abdalati, and Christine Wiedinmyer, retaliated against Plaintiff. This retaliation took many forms, including but not limited to:

- a. removing Plaintiff from access to multiple three NOAA email accounts used by Plaintiff in order to engage in the proper function his job;
- b. removing Plaintiff's job title;
- c. ordering contractor subordinate Juan Rodriguez to threaten Plaintiff;
- d. communicating to CIRES individuals that Plaintiff was engaged in protected whistleblower activity;
- e. causing Plaintiff to be isolated in his job by alienating him from colleagues;
- f. changing Plaintiff's job assignments to prevent him from engaging in his normal work activities or communicating with his peers via e-mail;
- g. interfering with professional opportunities;

h. ultimately causing Plaintiff's termination.

64. From 2017 to 2018 CIRES and NOAA officials, including but not limited to, Eric Kihn and Director Abdalati, spoke on the telephone, in person and via e-mail so as to generate a method by which retaliation against the Plaintiff would occur.

65. In 2018, and after he filed his OIG complaint, Plaintiff sent an email to NOAA officers, including Eric Kihn, disclosing concerns of ongoing retaliation for his protected activities.

66. There was no legitimate reason for Defendant and NOAA to engage in these retaliatory acts against Plaintiff.

67. Defendant's retaliation against Plaintiff was proximately and/or substantially caused by Plaintiff having blown the whistle regarding Defendant's and NOAA's waste, fraud and abuse in violation of 41 U.S.C. § 4712.

68. Plaintiff's report of the mismanagement of historical data amounted to protected whistleblower communications pursuant to 41 U.S.C. *sec.* 4712, the Federal Records Act 44 U.S.C. § 3101 *et seq* and NAO 212-15 and NOAA's Scientific Integrity Policy.

### **Paris Climate Accords Controversy**

69. The 2018 order to ship data to North Carolina raised many concerns. One of these was that a former NOAA Director, Tom Karl, had a history of destroying source data. This history was continued with the 2015 and 2018 data destruction, as alleged, *supra*.

70. Specifically, in 2015, Karl issued a report showing "no 'hiatus'" in global warming in the 2000's without archiving or documenting a critical climate dataset in accordance with NOAA policy and established scientific norms. Karl's scientific report was used to develop the position that world temperatures were experiencing an ongoing warming trend and was relied

upon by the United States to support its position that the country should enter the Paris Climate Accords, which it did.<sup>5</sup>

71. The data Karl used to generate this report, known as “metadata,” as well as its related algorithms, was destroyed before there was an opportunity for review by scientists and especially NOAA scientists. As such, the Karl report failed to become available for proper scientific scrutiny and was an illegitimate source for the scientific conclusions stated therein.

72. The use of Karl’s 2015 report, without verifiable supporting metadata, to influence the United States participation in the Paris Climate Accords was contrary to well-established scientific norms.

73. The Tom Karl report along with the 2015 and 2018 data move, created an irretrievable breakdown in historical data stewardship and caused weather data to be lost and to become unavailable to researchers, causing a major loss of the historical weather record.

### **2021 Report of Unauthorized Activity Suspected Espionage**

74. In approximately January of 2021, Plaintiff learned that a University of Colorado researcher, Dr. Nicolas Zobotin, was acting suspiciously with regards to a sensitive experiment. Plaintiff reported this information to a military program leader.

75. Later, in June 2023, Plaintiff again learned that Dr. Zobotin was engaged in suspicious activity, but at this time, concerning radar equipment. Consequently, Plaintiff restricted Dr. Zobotin’s access to said equipment. The radar equipment was managed by Plaintiff and Dr. Bullet and not owned or controlled by the University of Colorado.

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<sup>5</sup> The Paris Climate Agreement, often called the “Paris Climate Accords,” is a legally binding international treaty designed to bring all nations into a common cause to combat climate change and to adapt to its effects, with a specific focus on reducing greenhouse gas emissions to limit global temperature rises. The Agreement was adopted by 195 nations, including the United States by then President Obama, in Paris on December 12, 2015.

76. The radar systems, managed by Plaintiff and Dr. Bullet, provided significant information referable to, among other things, contemporary weather data and contributed to an understanding of “climate change.”

77. In response, Dr. Zabolin complained to the University’s Dean of Engineering, Massimo Ruzzene, who then worked, with Director Abdalati, to take full control of the hardware and software associated with the radar systems.

78. To have taken control of these radar systems and data would have not only created security risks but also would have facilitated the University of Colorado to have more control over the weather/climate narrative, to which it financially benefits.

79. In early September, 2021, Plaintiff and Dr. Bullet reported additional suspicions of espionage involving Abdalati to Plaintiff’s and Dr. Bullet’s federal supervisor, NOAA official Rob Redmon and/or NOAA Corps., Lt. Commander Brian Begun.

80. Lt. Begun shared the substance of Plaintiff’s and Dr. Bullet’s report to NOAA officials Eric Kihn, Scott Hausman, Laurel Rachmeller, and Stephanie Herring.

81. As a result of Plaintiff having blown the whistle to federal supervisors, Abdalati and his subordinates retaliated against Plaintiff, including harassment, threats of discipline up to and including termination.

82. Eric Kihn, and others, shared Plaintiff’s and Dr. Bullet’s protected reporting of potential espionage to Director Abdalati, who then engaged in further retaliation against Plaintiff, including but not limited to the following:

- a. issuing Dr. Bullet a sanctions letter;
- b. harassing Plaintiff’s and Dr. Bullet’s business partners, including but not limited to NASA, U.S. Geological Survey, and the U.S. Military;

- c. instructing CIRES employee, Ted DeMaria, to interfere with Plaintiff's and Dr. Bullet's negotiations with the University for ongoing funding for the ionosonde and radar systems management program they managed ("Program");
- d. causing the Program's funding to lapse, which Abdalati then used to request that Kihn remove Plaintiff's and Dr. Bullet's access to the mission systems to cause a cessation of the program and Plaintiff and Dr. Bullet's access to same; and
- e. interfering with Plaintiff's prospective business and employment opportunities.

#### **Interference with Plaintiff's Prospective Employment and Economic Advantage**

83. In September 2018, Plaintiff formed Mabie Exploration LLC with the intention of profiting from his work with ionosonde doppler radar systems. Initial work focused on establishing an interstate motor carrier in support of deployment of a mobile ionosonde and space weather system for which he applied for a patent. Expected clients for the ionosonde business was the military and scientific researchers.

84. In or around 2017 Dr. Bullett formed Front Range Radio LLC with the intention of providing ionosonde services. The focus was on development and sales of critical ionosonde components. Clients for Front Range Radio includes scientific researchers, foreign governments military contractors.

85. Abdalati was aware of these business ventures as Plaintiff and Dr. Bullet were required to report these business activities.

86. In or about 2007, Dr. Bullet moved the Air Force ionosonde program to NOAA where he resigned his federal position and took a CIRES position.

87. NOAA was a necessary partner because the program relied on obtaining real time data through United Nations agreements that could only be fully implemented at this time, through NOAA. This funding was renewed every one to three years as was necessary for fulfillment of military requirements and NOAA mandates.

88. In response to and in retaliation for Plaintiff's protected whistleblowing activities, Abdalati intentionally and knowingly interfered with his (and Dr. Bullet's) economic advantage by, *inter alia*:

- a. directing Ted DeMaria to involve himself with the University contracting office negotiations with the funding source (late 2021 to mess with 2022 contract);
- b. fabricating concerns regarding Plaintiff's and Dr. Bullet's work;
- c. causing the Program contract negotiations to be delayed until there was a funding lapse;
- d. conspiring with Kihn to remove Plaintiff's and Dr. Bullet's access to the Program's systems;
- e. terminating Plaintiff's employment;
- f. causing permanent loss of key data streams and physical management of instruments in Puerto Rico, Texas and Colorado;
- g. removing and barring Plaintiff and Dr. Bullet from the NOAA Table Mountain facility;
- h. charging Plaintiff and Dr. Bullet to reclaim their own hardware;
- i. improperly billing Plaintiff and Dr. Bullet's clients;
- j. impairing Plaintiff's and Dr. Bullet's ability to run the complex program;
- k. impairing Plaintiff's and Dr. Bullet's receipt of funding.

89. Because the program was essential to meet specific military requirements and because Plaintiff and Dr. Bullet were the only individuals who were capable of performing the work in 2024, the funding would have continued, through the private businesses, indefinitely, if it were not for the interference.

90. As a direct and proximate result of Abdalati's conduct, Plaintiff suffered damages.

### **Defendant's and NOAA's Motivation to Destroy Historical Weather Data**

91. Both CIRES supervisory staff and NOAA staff worked together to destroy essential documents found in the United States' and United Nations' historical weather record to generate a narrative that global warming and climate change are occurring at such a rapid rate that intervention in the Earth's weather by the world's governments and private actors—by way of geoengineering and weather modification—is necessary.

92. Such scientific, self-fulfilling prophecies enrich Defendant and its CIRES division, as more government projects related to geoengineering and weather modification would flow to the University, generating many millions of dollars in revenue each year. To wit, Defendant's CIRES receives significant annual funding from NOAA, with the current major cooperative agreement valued at roughly \$213.6 million over five years (starting in 2022).<sup>8</sup>

93. Plaintiff's whistle blowing regarding data destruction hampered these efforts and, thus, Defendant worked directly with NOAA, jointly and in collusion, to retaliate against Plaintiff to prevent him from ongoing work, up to and including terminating his employment.

### **The United States' Government's Long History with Geoengineering and Weather Modification**

94. Defendant's motivations to alter data further stem from the United States' ongoing pursuit to intervene in the Earth's weather. Without continued funding, government weather modification projects—which have existed for decades—would cease to exist.

95. For decades, the U.S. government has conducted weather modification experiments, and recently, has directed research into solar climate intervention.

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<sup>8</sup> U.S. Dep't of Commerce, Award to The Regents of the University of Colorado, FAIN No. NA22OAR4320151 (Sept. 2022), [https://www.usaspending.gov/award/ASST\\_NON\\_NA22OAR4320151\\_1330](https://www.usaspending.gov/award/ASST_NON_NA22OAR4320151_1330).

96. Solar climate interventions—commonly referred to as “solar radiation modification” (SRM)—involve the use of aerosols or other materials to increase the reflectivity of the atmosphere, clouds, and/or Earth’s surface. “Stratospheric aerosols injection” (SAI) and “marine cloud brightening” (MCB) are the most common methods of SRM (Exhibit BB<sup>9</sup>).

97. SAI involves the direct injection of aerosols or by injection of a precursor gas (such as sulfur dioxide) that would subsequently react in the stratosphere to form aerosols. Proposed aerosols include sulfate, calcium carbonate, and diamond dust. *Id.*

98. MCB involves injecting sea salt aerosol into low-level marine clouds to increase reflectivity by increasing the number of small cloud droplets. *Id.*

99. The United States, other governments, and private actors are engaging in the manipulation of the Earth’s weather by, *inter alia*:

- a. allowing chemical/condensation trails to accumulate behind airplanes on a massive scale, dramatically altering the Earth’s atmosphere, temperature and weather;
- b. allowing the chemical composition of jet fuel to be of such a quality that it alters the trails left behind airplanes, dramatically altering the Earth’s atmosphere, temperature and weather;
- c. allowing particulate matter and other contaminants to create trails behind airplanes, dramatically altering the Earth’s atmosphere, temperature and weather;
- d. funding of tens of millions of dollars annually, in research into atmospheric processes, aerosols, solar radiation, and related activities that include the study and evaluation of potential atmospheric intervention techniques;
- e. upon information and belief, funding, supporting, authorizing, or otherwise enabling research and activities conducted by private corporations and institutional partners involving the study and/or release particulate matter and other substances into the atmosphere for purposes including atmospheric research and potential weather or climate modification;

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<sup>9</sup> U.S. Dep’t of Commerce, Nat’l Oceanic & Atmospheric Admin., *State of the Science Fact Sheet: Solar Radiation Modification* (July 2024).

- f. participating in and supporting international research collaborations, data-sharing initiatives, and coordinated scientific efforts concerning atmospheric processes, aerosols, and solar radiation, including research relevant to potential atmospheric intervention techniques;
- g. working directly and/or indirectly with private companies, including but not limited to Make Sunsets, Rainmaker Technology Corp., and Stardust Solutions, by allowing or failing to restrict their activities within United States airspace involving the release of substances into the atmosphere intended to influence atmospheric conditions.

100. Specifically, the U.S. government is the exclusive holder of weather modification patents which, besides actually the modifying the weather, cause harmful pollutants to enter the atmosphere, including but not limited to:

- a. U.S. Patent 3,613,992 produces rain or snow by seeding clouds with finely divided solid agents such as urea, potassium nitrate, potassium nitrite, and ammonium nitrate (Exhibit A<sup>10</sup>);
- b. U.S. Patent 3,915,379 burns metallic particles to create silver iodide-based ice nuclei for cloud seeding (Exhibit B<sup>11</sup>);
- c. U.S. Patent 3,940,059 describes the dispersion of warm fog by spraying into the fog cloud a hygroscopic solution of urea and ammonium nitrate dissolved into water (Exhibit C<sup>12</sup>);
- d. U.S. Patent 4,141,274 describes a weather modification automatic cartridge dispenser for automatically igniting and dispensing pyrotechnic rounds from an aircraft (Exhibit D<sup>13</sup>);
- e. U.S. Patent 4,653,690 describes the use of compounds of known toxicity such as hexachlorobenzene, hexachloroethane, and others, as pyrotechnic compounds to disrupt thermal inversions in the atmosphere (Exhibit E<sup>14</sup>);
- f. U.S. Patent 11,116,150 describes a spray assembly for aircraft, to spray electrically charged fluid underneath clouds to artificially create precipitation (Exhibit F<sup>15</sup>).

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<sup>10</sup> Robert G. Knollenberg Mattoon, III, U.S. Patent No. 3,613,992 (Oct. 19, 1971) (assigned to the United States of America).

<sup>11</sup> Lohr A. Burkardt et al., U.S. Patent No. 3,915,379 (Oct. 28, 1975) (assigned to the United States of America).

<sup>12</sup> Richard S. Clark et al., U.S. Patent No. 3,940,059 (Feb. 24, 1976) (assigned to the United States of America).

<sup>13</sup> Robert L. Gerber, U.S. Patent No. 4,141,274 (Feb. 27, 1979) (assigned to the United States of America).

<sup>14</sup> Pierre St. Amand & Larry A. Matthews, U.S. Patent No. 4,653,690 (Mar. 31, 1987) (assigned to the United States of America).

<sup>15</sup> Daniel E. Martin et al., U.S. Patent 11,116,150 B2 (Sept. 14, 2021) (assigned to the United States of America).

- g. U.S. Patent application US2025/0148176 A1 describes using an orbital “mega-mirror” to intentionally direct solar energy to disrupt and alter severe weather events such as hurricanes (Exhibit G<sup>16</sup>).

101. The U.S. government has also sponsored weather modification military operations in the United States and abroad, including but not limited to:

- a. In 1947, the U.S. government launched Project Cirrus which aimed to seed and modify hurricanes but created immense danger when a seeded hurricane unexpectedly changed course and struck the U.S. coast (Exhibit P<sup>17</sup>);
- b. In 1950, the U.S. Navy launched Operation Sea Spray which sprayed dangerous *Serratia marcescens* bacteria over San Francisco (Exhibit Q<sup>18</sup>);
- c. Between 1954-1970, the U.S. Forest Service launched Project Skyfire which used cloud seeding with silver iodide to suppress lightning and reduce forest fires (Exhibit R<sup>19</sup>);
- d. In 1958, the U.S. military launched Project Argus which detonated three nuclear devices in the South Atlantic to create artificial radiation belts (Exhibit S<sup>20</sup>);
- e. Between 1961-1963, the U.S. Air Force launched Project West Ford which dispersed millions of copper dipoles into orbit to create a reflective belt for military radio (Exhibit T<sup>21</sup>);
- f. Between 1961-1988, the U.S. Bureau of Reclamation launched Project Skywater which used cloud seeding with silver iodide in the western United States (Exhibit U<sup>22</sup>);

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<sup>16</sup> Mark Fry, U.S. Patent Application Publication No. US2025/0148176 A1 (May 8, 2025) (assigned to the United States of America).

<sup>17</sup> Angus Watt, Lieutenant Colonel, Canadian Air Force, *Weather Modification: The Ultimate Weapon?* (Air War College, Air University, Apr. 1993) at PDF 10-11.

<sup>18</sup> U.S. Dep’t of the Army, *U.S. Army Activity in the U.S. Biological Warfare Programs*, Vol. I, at PDF p. 21 (25 Feb. 1977) (declassified 31 Dec. 2007).

<sup>19</sup> Donald M. Fuquay & H.J. Wells, *The Project Skyfire Cloud-Seeding Generator* (U.S. Forest Service, Intermountain Forest and Range Experiment Station, Research Paper No. 48, 1957) at PDF pp. 1-4.

<sup>20</sup> U.S. Dep’t of Defense, Defense Threat Reduction Agency, *Fact Sheet: Operation ARGUS* (Sept. 2021).

<sup>21</sup> Subcommittee on Project West Ford, Defense Science Board, *West Ford Communication Techniques: Cost, Effectiveness and Potential vs. Competing Systems* (13 May 1965), at PDF pp. 10-14.

<sup>22</sup> Jedediah S. Rogers, *Project Skywater*, Historic Reclamation Projects (Bureau of Reclamation, 2009) (reformatted, reedited, and reprinted by Andrew H. Gahan, July 2013), at PDF p. 3.

- g. Between 1962-1983, NOAA and the U.S. Navy launched Project Stormfury which weakened hurricanes via silver iodide seeding (Exhibit V<sup>23</sup>);
- h. Between 1968-1972, the U.S. government launched Project Popeye which involved a military cloud-seeding operation over the Ho Chi Minh Trail that resulted in torrential rainstorms destroying an estimated 10 percent of the rice crops. (Exhibit P at 10-11);
- i. In April 2009, U.S. Air Force Major, Michael C. Boger stated that advances in technology are bringing the weather fully under the Air Force's control and proposed the use of diamond-walled balloon nanotechnology to create fog and stratus cloud formations (Exhibit W<sup>24</sup>).
- j. In November 2023, the National Science Foundation used the High Frequency Active Auroral Research Program facility in Alaska to heat up the atmosphere with radio waves to create faint glows like the natural aurora (Exhibit X<sup>25</sup>).

### **United States and Private Enterprise Funding Of Geoengineering and Weather Modification**

102. Over at least the past two decades, the United States has funded Geoengineering solar climate intervention and weather modification research and projects. This funding goes to Agency and University sponsored weather modification and solar climate intervention research.

103. Between 2009 and 2010, the U.S. government funded fifty-two (52) geoengineering research and experiments involving the dispersal of aerosols into the Earth's atmosphere totaling approximately \$100.9 million. A portion of those funds were used by the Department of Commerce, the Department of Energy, and National Science Foundation

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<sup>23</sup> H.E. Willoughby, D.P. Jorgensen, R.A. Black & S.L. Rosenthal, *Project STORMFURY: A Scientific Chronicle 1962-1983* (NOAA Atlantic Oceanographic and Meteorological Laboratory 1985).

<sup>24</sup> Michael C. Boger, *Operational Defenses through Weather Control in 2030*, at PDF p. 2 (Air Command & Staff Coll., Air Univ., Apr. 2009) (Distribution A: Approved for Public Release; distribution unlimited).

<sup>25</sup> HAARP Program Office, *Notice of Transmission* (Univ. of Alaska Fairbanks, Nov. 1, 2023), at PDF pp. 1-4.

specifically for solar radiation modification and stratospheric aerosol injection research (Exhibit Y<sup>26</sup>).

104. Since, fiscal year 2020, Congress has allocated a minimum of \$4 million annually to NOAA's Earth Radiation Budget program specifically for research into solar radiation modification and stratospheric aerosol processes. These funds have been used by NOAA in partnership with CIRES to conduct the “Stratospheric Aerosol processes, Budget and Radiative Effects” or “SABRE campaign.” (Exhibit Z<sup>27</sup>)]. The SABRE project conducts high-altitude research aircraft deployments to research aerosols and solar climate intervention (Exhibit AA<sup>28</sup>). CIRES provided scientific and instrument support for the SABRE project, analyzing aerosols and solar climate intervention in the upper troposphere and lower stratosphere.<sup>29</sup>

105. Further, the National Center for Atmospheric Research (NCAR) received approximately \$44.8 million in 2021 from NOAA, NASA, DOE, DOD, and FAA used for atmospheric research (Exhibit CCC<sup>30</sup>) to be distributed to unknown recipients.

106. The National Science Foundation (NSF) provided seven grants totaling approximately \$4,612,741 in 2020-2025 (Exhibit ZZ at 29).

107. In 2022, Congress directed NOAA to conduct a five-year study in how to intervene in the Earth’s weather. This directive resulted in the June 2023 “Congressionally Mandated Report on Solar Radiation Modification” and the continued execution of SABRE campaign through the NOAA-CIRES partnership, which uses NASA's high-altitude WB-57 aircraft to collect detailed, *in*

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<sup>26</sup> U.S. Gov’t Accountability Off., *Climate Change: A Coordinated Strategy Could Focus Federal Geoengineering Research and Inform Governance Efforts*, GAO-10-903, at PDF 2, 67-68 (Sept. 2010).

<sup>27</sup> 165 Cong. Rec. H10, PDF 351-52 (daily ed. Dec. 17, 2019) (Explanatory Statement Submitted by Mrs. Lowey, Chairwoman of the House Committee on Appropriations, Regarding H.R. 1158, Consolidated Appropriations Act, 2020) (Book II).

<sup>28</sup> Nat’l Aeronautics & Space Admin., *Airborne Science Program FY2023 Annual Report* (2024), at 58-59.

<sup>29</sup> *Id.* at p. 60.

<sup>30</sup> Nat’l Sci. Found., *Fiscal Year 2021 Budget Request to Congress* (Feb. 2020), at 57-58.

*situ* measurements of trace gases and aerosol particles in the upper troposphere and lower stratosphere (UTLS), at altitudes up to 60,000 feet to understand the chemical composition, dynamics, and aerosol formation in the stratosphere to improve climate models. (Exhibit DD<sup>31</sup>).

108. Subsequently, in June 2023, the White House Office of Science and Technology Policy (OSTP) determined that the risks associated with SRM (e.g. SAI, MCB) included impacts on human health, mental health, air quality, food and water security, impacts on vulnerable or frontline communities, geopolitical tensions, altered precipitation patterns, shifts in climate variability and extremes, and ozone depletion among others. (Exhibit EE<sup>32</sup>).

109. In 2024, state and local agencies allocated a combined total of \$20 million on cloud seeding operations. These funds support aerial activities using silver iodide and other potentially harmful agents in the Western United States in order to induce and/or limit rainfall for crops and/or livestock. (Exhibit FF<sup>33</sup>).

110. In 2025, the U.S. Senate directed NOAA to continue funding the “Earth Radiation Budget Program” for research into SRM. These funds support CIRES scientists to perform SRM research on stratospheric aerosols (Exhibit HH<sup>34</sup>, JJ<sup>35</sup>).

111. NCAR received \$104.64 million and approximately \$116.2 million from the National Science Foundation through University Corporation for Atmospheric Research (UCAR) in 2022; these funds contribute to geoengineering research (Exhibit KK<sup>36</sup>).

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<sup>31</sup> Explanatory Statement, Consolidated Appropriations Act, 2022, Div. B, at PDF 233, CPRT-117HPRT47047 (2022).

<sup>32</sup> Off. Of Sci. & Tech. Pol’y, Congressionally Mandated Research Plan and an Initial Research Governance Framework Related to Solar Radiation Modification 12-15, 27-33 (June 2023).

<sup>33</sup> U.S. Gov’t Accountability Off., *Weather Modification: NOAA Should Strengthen Oversight to Ensure Reliable Information*, GAO-26-108013, at PDF 6 (Feb. 2026).

<sup>34</sup> S. Rep. No. 119-44, at PDF 55 (2025).

<sup>35</sup> David W. Fahey & Troy D. Thornberry, *Stratospheric Aerosol Processes, Budget and Radiative Effects (SABRE) Campaign Overview*, NOAA Chemical Sciences Laboratory (2024).

<sup>36</sup> Nat’l Sci. Found., *National Center for Atmospheric Research (NCAR)*, at PDF pp. 1-3 (FY 2024 Budget Request to Congress).

112. DOD (DARPA) provided Colorado State University (CSU) with \$953,335 for solar climate intervention research in 2023 (Exhibit LL<sup>37</sup>).

113. Quadrature Climate Foundation provided CSU with \$8,630,728 for solar climate intervention research for 2024-2029. *Id.*

114. LAD Climate Fund provided CSU with \$600,000 for solar climate intervention research for 2022-2025. *Id.*

115. NOAA Climate Program Office provided \$718,781 to CSU for solar climate intervention research for 2022-2025. *Id.*

116. Alliance for Just Deliberation on solar geoengineering provided approximately \$99,981 to the United States for general geoengineering research in 2024 (Exhibit ZZ<sup>38</sup>).

117. Forum for Climate Engineering Assessment provided approximately \$106,333 to the United States for general geoengineering research in 2022. *Id.*

118. Quadrature Climate Foundation provided University of Chicago's Climate Systems Engineering Initiative (CSEi) approximately \$4,919,108 for solar climate intervention research in 2025. *Id.*

119. Quadrature Climate Foundation provided Colorado State University approximately \$4,604,255 for solar climate intervention research in 2024. *Id.*

120. Quadrature Climate Foundation provided Cornell University approximately \$2,508,464 for solar climate intervention research in 2024. *Id.*

121. Quadrature Climate Foundation provided Silver Lining with approximately \$11,768,021 for solar climate intervention research in 2024. *Id.*

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<sup>37</sup> James W. Hurrell, *Curriculum Vitae* (July 2025).

<sup>38</sup> Jared Sanborn & J.P. Sapinski, *Who Funds and Who Pays: The Funding of Solar Geoengineering, 2020-2025* (Heinrich Boll Foundation, Apr. 2026), at 36.

122. Quadrature Climate Foundation provided University Corporation for Atmospheric Research (UCAR) with approximately \$2,603,205 for solar climate intervention research in 2023.

*Id.*

123. Quadrature Climate Foundation provided University of Washington approximately \$2,569,646 for solar climate intervention research in 2023. *Id.*

124. Open Society Foundations provided the United States approximately \$243,896 for geoengineering research in 2020-2025. *Id.* at 33.

125. The Advanced Research and Invention Agency (ARIA) provided the United States approximately \$5,258,793 for geoengineering research in 2024-2025. *Id.* at 29.

126. The European Union provided the United States with approximately \$1,225,539 for geoengineering research in 2020-2025. *Id.*

127. In 2024, Congress allocated not less than \$430,000,000 to the Department of Energy (DOE) for atmospheric research; these funds are used to support the Atmospheric System Research (ASR) program and the Atmospheric Radiation Measurement (ARM) user facilities specifically for atmospheric aerosol and cloud formation research (Exhibit MM<sup>39</sup>, NN<sup>40</sup>, OO<sup>41</sup>).

128. DOE funded Sandia National Laboratories to conduct atmospheric research simulating stratospheric aerosols in 2025 (Exhibit PP<sup>42</sup>, QQ<sup>43</sup>).

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<sup>39</sup> Joint Explanatory Statement for the Energy and Water Development Appropriations Act, 2024, at PDF pp. 81-82 (2024).

<sup>40</sup> U.S. Dep't of Energy, Biological and Environmental Research FY2025 Congressional Justification (2024), at PDF 13.

<sup>41</sup> Atmospheric Radiation Measurement (ARM) User Facility, *2024 ARM Annual Report*, DOE/SC-ARM-24-028 (2024), at PDF 7, 9, 11

<sup>42</sup> U.S. Dep't of Energy, *FY 2026 Congressional Justification: Laboratory Tables*, DOE/CF-0219, at PDF pp. 100-103.

<sup>43</sup> Sandia Nat'l Lab'ys, *Climate Impact: Determining Etiology through pathway (CLDERA) Final Report*, SAND2024-13423, at PDF p. 3 (Sept. 2024).

129. The U.S. Army in fiscal year 2026 appropriations requested funding for aerosol sciences and research on aerosol transport in the atmosphere; these funds support research into the transport, dispersion, and characterization of chemical and biological aerosols (Exhibit RR<sup>44</sup>).

130. The United States Department of Energy Office of Science is currently soliciting applications for Atmospheric Process Research; the application process is ongoing until September 2026 (Exhibit SS<sup>45</sup>).

131. In sum, the United States government and private enterprise, funds and coordinates extensive scientific research concerning the Earth's atmosphere, including atmospheric chemistry, aerosol dynamics, cloud formation, and radiative forcing, through agencies including NOAA, the Department of Energy, and the National Science Foundation.<sup>46</sup>

132. These federally funded and private efforts are supported through appropriations, cooperative agreements and research programs administered in coordination with universities, national laboratories, and federally funded research centers, including cooperative institutes and academic research partners.<sup>47</sup>

133. The federal government, along with private enterprise, expends hundreds of millions of dollars annually on atmospheric, climate, and Earth system research, including large-

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<sup>44</sup> U.S. Dep't of the Army, *Research, Development, Test & Evaluation, Army, Budget Activity 1, Fiscal Year 2026 Budget Estimates* (June 2025), at PDF 35-37 (Project AA1: ILIR-AMC).

<sup>45</sup> U.S. Dep't of Energy, Office of Science, *FY 2026 Continuation of Solicitation for the Office of Science Financial Assistance Program*, Notice of Funding Opportunity No. DE-FOA-0003600, at PDF p. 61 (Sept. 30, 2025).

<sup>46</sup> NOAA, *State of the Science Fact Sheet: Solar Radiation Modification* (July 2024); DOE, *Biological and Environmental Research FY2025 Congressional Justification* (2024) <https://www.energy.gov/sites/default/files/2024-03/FY2025-PresidentsRequest-BER.pdf>; NSF, *National Center for Atmospheric Research (NCAR) Funding* <https://www.nsf.gov>.

<sup>47</sup> NOAA Cooperative Institute Award (University of Colorado) [https://www.usaspending.gov/award/ASST\\_NON\\_NA22OAR4320151\\_1330](https://www.usaspending.gov/award/ASST_NON_NA22OAR4320151_1330); NOAA Cooperative Institutes Program <https://ci.noaa.gov>

scale investments in research infrastructure, observational systems, modeling capabilities, and institutional research programs.<sup>48</sup>

134. CIRES at the University of Colorado, competes for these dollars in the domain of geoengineering and weather modification and benefits from narratives that enrich CIRES with regard to historical temperature warming trends of the planet.

135. Within this broader scientific enterprise, federal agencies have also funded and coordinated more targeted research into atmospheric intervention-related processes, including studies concerning aerosols, solar radiation, and cloud modification mechanisms, as reflected in federal reports and research planning documents.<sup>49</sup>

136. Such targeted research has historically been funded at substantially lower levels than general atmospheric science, generally on the order of tens of millions of dollars annually and exists within a broader global research effort estimated at approximately \$200 million through 2024.<sup>50</sup>

137. Federally funded atmospheric research programs develop and utilize advanced modeling, observational, and experimental capabilities, including studies of aerosol behavior,

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<sup>48</sup> DOE BER Budget Request (~\$945M): <https://www.energy.gov/sites/default/files/2024-03/FY2025-PresidentsRequest-BER.pdf>; NOAA Budget Estimates FY2025:

<https://www.noaa.gov/budget>; NSF Atmospheric & Geospace Sciences Funding: <https://www.nsf.gov>.

<sup>49</sup> White House OSTP, *Congressionally Mandated Research Plan and Governance Framework for Solar Radiation Modification* (June 2023)

<https://www.whitehouse.gov/wp-content/uploads/2023/06/SRM-Report-2023.pdf>; GAO, *Weather Modification: NOAA Should Strengthen Oversight* (2026)

<https://www.gao.gov/products/gao-26-108013>

<sup>50</sup> GAO Report (2026):

<https://www.gao.gov/products/gao-26-108013>; OSTP SRM Report (2023): <https://www.whitehouse.gov/wp-content/uploads/2023/06/SRM-Report-2023.pdf>

cloud interactions, and radiative processes, which are necessary to understand, evaluate, and predict changes in atmospheric systems.<sup>51</sup>

138. These programs are carried out through a network of federal agencies, national laboratories, cooperative institutes, and academic partners, which collectively generate the scientific data, technical expertise, and analytical capabilities used to study atmospheric processes and potential intervention-related phenomena.<sup>52</sup>

139. The U.S. Government, in conjunction with federal agencies, national laboratories, private enterprise, cooperative institutes—such as Defendant’s CIRES—and academic partners, have an incentive to manipulate data to justify their efforts and divert hundreds of millions, of taxpayer dollars.

#### **Private Entities – Geoengineering and Weather Modification**

140. The United States government also permits private entities to engage in dangerous weather modification and geoengineering operations with little-to-no oversight or accountability.

141. Stardust Solutions, incorporated in 2023, acquired over \$60 million to develop Sunlight Reflection Technology (SRT), which disperses aerosols via aircraft (Exhibit UU<sup>53</sup>).

142. Make Sunsets, incorporated in October 2022, is registered in Box Elder, South Dakota. Make Sunsets acquired over \$1 million to launch sulfur dioxide via large balloons into the stratosphere, creating reflective clouds lasting six months to three years (Exhibit VV<sup>54</sup>).

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<sup>51</sup> DOE BER Justification (clouds, aerosols, radiation):

<https://www.energy.gov/sites/default/files/2024-03/FY2025-PresidentsRequest-BER.pdf>; NOAA Airborne Science / Aerosol Research Programs <https://www.noaa.gov>

<sup>52</sup>NOAA Cooperative Institutes <https://ci.noaa.gov>; NSF / NCAR <https://ncar.ucar.edu>.

<sup>53</sup> *Stardust Solutions Raises \$60 Million to Test Sun-Reflecting Technology*, Heatmap News, Oct. 24, 2025.

<sup>54</sup> Bruce Crumley, *Startup Make Sunsets Wants to Fight Global Warming by Making Aerosol Clouds*, Inc., Oct. 15, 2024.

143. Sunscreen Inc., incorporated in August 2025, is registered in Los Angeles, California. Sunscreen is developing localized solar climate intervention technology. (Exhibit WW<sup>55</sup>).

144. Rainmaker Technology Corporation, incorporated in 2023, is registered in El Segundo, California. Rainmaker acquired over \$31 million to develop drone-based clouding seeding technology which disperses silver-iodide to increase rainfall (Exhibit XX<sup>56</sup>).

145. The above-mentioned private enterprise activities are authorized to inject weather modification and/or geoengineering contaminants and pollutants into the atmosphere as long as they provide ten (10) days' advance notice to NOAA prior to initiating such activity. 15 U.S.C. §§ 330–330e and 15 C.F.R. § 908.4.

146. This statutory framework imposes a reporting requirement only, not an approval process.

147. The United States government does not approve or authorize these activities but merely leaves the door open for atmospheric contamination for weather modification/geoengineering purposes” as long as the government receives 10 day’s notice by way of reporting to NOAA. Approval not required.

148. In other words, the United States government knows that the “door is open” to introduce gasses and particulate matter into the atmosphere as long as the government receives 10 day’s notice of same through NOAA

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<sup>55</sup> Sunscreen Energy, Sunscreen—Stopping Heat Waves and Extreme Heat, <https://sunscreenscreen.energy/> (last visited Apr. 11, 2026).

<sup>56</sup> Sacra, *Rainmaker*, <https://sacra.com/research/rainmaker/> (last visited Apr. 10, 2026).

149. The United States government is also aware of geoengineering and weather modification activities as its U.S. Patent and Trademark Office has issued patents to private entities for weather modification, including but not limited to:

- a. U.S. Patent 5,003,186 describing “seeding the greenhouse gas layer [of the Earth’s atmosphere] with a quantity of tiny particles of materials,” via aircraft, including Welsbach particles, Aluminum oxide, and thorium oxide (Exhibit H<sup>57</sup>);
- b. U.S. Patent 8,944,363 describing the use of aircraft engines to disperse sulfur dioxide into the atmosphere by multiple means, including deliberate use of high-sulfur fuels. It also describes a variety of other methods of deliberate spraying of materials such as “sulfate, fossil fuel organic carbon, nitrate or mineral dust, or soot” from aircraft or other “vehicles” into the atmosphere (Exhibit I<sup>58</sup>);
- c. U.S. Patent 11,573,578 using unmanned aerial vehicles (UAVs) to disperse aerosols for weather modification (Exhibit J<sup>59</sup>);
- d. World Intellectual Property Organization Patent Application WO2024/205691 A1 describing a balloon-powered apparatus to deliver sulfur dioxide and sulfates into the stratosphere (Exhibit K<sup>60</sup>);
- e. U.S. Patent application US2023/0249821 A1 using hollow silicate microspheres as reflective particles for solar radiation modification (Exhibit L<sup>61</sup>).
- f. U.S. Patent 6,315,213 describing a method of artificially modifying the weather by seeding rain clouds with superabsorbent cross-linked aqueous polymers. The polymers absorb the rain, and the reaction forms a gelatinous substance which precipitates to the surface below (Exhibit M<sup>62</sup>).
- g. U.S. Patent 5,984,239 describing “A Satellite Weather Modification System (SWMS) [that] uses Earth satellites to harness solar energy to modify the thermodynamics and composition of the Earth’s atmosphere” (Exhibit N<sup>63</sup>).
- h. U.S. Patent application US2024/0272328 using smart phones “for monitoring the spraying of sunlight reflecting particles into the stratosphere” (Exhibit O<sup>64</sup>).

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<sup>57</sup> David B. Chang & I-Fu Shih, U.S. Patent No. 5,003,186 (Mar. 26, 1991) (assigned to Hughes Aircraft Co.).

<sup>58</sup> Robert Theodore Jenkins, U.S. Patent No. 8,944,363 (Feb. 3, 2015) (assigned to TGV, LLC).

<sup>59</sup> Zilberstein et al., U.S. Patent No. 11,573,578 (Feb. 7, 2023) (assigned to Almog Rescue Systems Ltd.).

<sup>60</sup> Make Sunsets Inc., WO Patent Application No. WO2024/205691 (Oct. 3, 2024).

<sup>61</sup> Peter Butzloff, U.S. Patent Application Publication No. US2023/0249821 A1 (Aug. 10, 2023) (assigned to Sinapu LLC).

<sup>62</sup> Peter Cordani, U.S. Patent No. 6,315,213 (Nov. 13, 2001).

<sup>63</sup> Franklin Y. K. Chen, U.S. Patent No. 5,984,239 (Nov. 16, 1999).

<sup>64</sup> J.S. Weinroth, U.S. Patent Application Publication No. US2024/0272328 A1 (Aug. 15, 2024).

### **The EPA Admits to Geoengineering and Weather Modification Practices and Warns of Their Dangers**

150. The aforementioned endeavors are not conspiracy theories but are substantiated by the United States government.

151. Specifically, the Environmental Protection Agency's current Administrator, Lee Zeldin, has confirmed that the United States, foreign governments, and private actors have been engaged in geoengineering and weather modification efforts and other activities designed to intervene in the Earth's weather:

152. On July 10, 2025, Zeldin warned of the use of geoengineering practices, stating:

There are potential threats to human health and the environment, especially from Solar Geoengineering Activities....

Experiments that would pump pollutants into the high atmosphere have set off alarm bells here at the Trump EPA.<sup>65</sup>

153. On August 23, 2025, Zeldin admitted that the United States and foreign governments and private actors are participating in geoengineering and weather modification practices:

...there has been government funding that has gone towards some of these efforts...

There are entities and people who would want to drastically scale these activities up....

There are these activities to make changes to the stratosphere or the lower atmosphere and try to

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<sup>65</sup> U.S. Env'tl. Prot. Agency, *EPA Releases New Online Resources Giving Americans Total Transparency on the Issues of Geoengineering and Contrails* (July 10, 2025), <https://www.epa.gov/newsreleases/epa-releases-new-online-resources-giving-americans-total-transparency-issues>

deflect sun rays from hitting the Earth to instead send it back into space...

In the case of stratospheric aerosol injection, you are talking about putting sulfur dioxide, a lot of it, for a long time, into the upper atmosphere, which by the way, turns into acid rain....

There are real health concerns with regard to these activities...

[It is not thoroughly] studied, approved, trusted [and vetted]...

[Y]ou have people [that] want to do it on their own to [for someone to hand over a billion dollars and] dump a whole bunch of sulfur dioxide into the stratosphere... it does not sound good and does not sound right.

The consequences are grave....  
[A]ctivities are going on in Europe and Asia...  
What other countries decide to do impacts Americans.<sup>66</sup>

154. Based on the above, it is clear that there are financial and political incentives to engage in “research” geoengineering and weather modification, and that Plaintiff’s efforts to blow the whistle as to the failure to properly steward the historical weather record provided the animus for the Defendant to retaliate against the Plaintiff as set forth above. Notably, to retain the historical weather record is relatively inexpensive in comparison to the hundreds of millions of dollars spent on weather intervention.

**Count I**  
**Plaintiff v. The University of Colorado, CIRES**  
**41 U.S.C. sec. 4172**

Plaintiff restates and re-alleges paragraphs 1 through 154 as if stated herein.

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<sup>66</sup> *Is Cloudseeding Playing God? Trump EPA Chief Reacts | Lee Zeldin* | The Glenn Beck Podcast, YouTube (August 23, 2025), <https://www.youtube.com/watch?v=9E-h-kd3jrc>

155. Plaintiff experienced loss wages, future loss wages and pain and suffering due to the misconduct of the Defendant.

156. Defendant retaliated against the Plaintiff for whistleblowing.

157. Defendant, through its agents, was aware that Plaintiff complained of misconduct in the form of waste, fraud and abuse as well as suspected espionage and retaliated.

158. Plaintiff prays for compensatory damages as allowed by this Court and 41 U.S.C. *sec.* 4172

WHEREFORE, Plaintiff prays for damages in the form of loss wages, emotional distress and attorney fees.

Respectfully submitted,

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