ORAL ARGUMENT NOT YET SCHEDULED

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 21-1018 (AND CONSOLIDATED CASES)

STATE OF CALIFORNIA, et. al.,
Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,

Respondents,

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC., and THE BOEING COMPANY,

Intervenors.

BRIEF OF THOMAS C. JORLING AS AMICUS CURIAE IN SUPPORT OF PETITIONERS STATE OF CALIFORNIA, et. al., CENTER FOR BIOLOGICAL DIVERSITY, FRIENDS OF THE EARTH, and SIERRA CLUB

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

All parties, intervenors, and other *amici* appearing in this case are listed in the briefs for petitioners the State of California, et. al., the Center for Biological Diversity, Friends of the Earth, and Sierra Club.

References to the rulings under review and related cases also appear in the brief for petitioners.

STATEMENT REGARDING SEPARATE BRIEFING, AUTHORSHIP, AND MONETARY CONTRIBUTIONS

Under D.C. Circuit Rule 29(d), *amicus* Thomas C. Jorling states that he is aware of other planned *amicus* briefs in support of Petitioners. Separate briefing is necessary because none of the other *amicus* briefs will address the unique perspective of *amicus* Jorling as a principal staff drafter of the 1970 Clean Air Act Amendments. *See* Fed. R. App. P. 29(a)(5).

Under Federal Rule of Appellate Procedure 29(a)(4)(E), *amicus* states that no party's counsel authored this brief in whole or in part, and no party or its counsel made a monetary contribution intended to fund the preparation or submission of this brief. No person other than *amicus curiae* or his counsel contributed money that was intended to fund preparation or submission of the brief.

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GLOSSARY

"Act"	Clean Air Act
"Aircraft Rule"	*Control of Air Pollution From Airplanes and Airplane Engines: GHG Emission Standards and Test Procedures*, 86 Fed. Reg. 2136 (Jan. 11, 2021)
"CEQ"	Council on Environmental Quality
"Endangerment Finding"	*Finding That Greenhouse Gas Emissions From Aircraft Cause or Contribute to Air Pollution That May Reasonably Be Anticipated To Endanger Public Health and Welfare*, 81 Fed. Reg. 54,422 (Aug. 15, 2016)
EPA	U.S. Environmental Protection Agency
"GHG"	Greenhouse gas
"NEPA"	National Environmental Policy Act
"Section 231"	42 U.S.C. § 7571
"Section 232"	42 U.S.C. § 7572
"Section 233"	42 U.S.C. § 7573
"1970 Amendments"	1970 Clean Air Act Amendments

INTEREST OF AMICUS CURIAE

Amicus Thomas C. Jorling is a widely recognized expert on the drafting and evolution of the 1970 Clean Air Act Amendments, P.L. 91-604. As Minority Counsel for the United States Senate Public Works Committee from 1968 to 1972, Mr. Jorling was one the law's architects, personally engaging in drafting and deliberations. Accordingly, he has unmatched insight into the 1970 Amendments' design; Congress' intent in enacting them; and the principles that inform them. Based on this knowledge, Mr. Jorling authored an authoritative analysis of the 1970 Amendments as part of the Environmental Law Institute's effort to develop a "comprehensive analysis of the role of the federal government in protecting and enhancing environmental quality." *The Federal Law of Air Pollution Control*, in Environmental Law Institute, FEDERAL ENVIRONMENTAL LAW 1061 (Erica L. Dolgin and Thomas G. P. Guilbert eds., 1974), at *v*.

Subsequently, Mr. Jorling served as Assistant Administrator at the U.S. Environmental Protection Agency and Commissioner of the New York State Department of Environmental Conservation, where he was responsible for interpreting and implementing the Clean Air Act.

Amicus has a significant interest in the outcome of the legal issues in this case. Specifically, he seeks to ensure that the Clean Air Act, 42 U.S.C. § 7401 be interpreted as it was written and intended by Congress. He submits this brief to

underline that Congress drafted Section 231 of the Act, 42 U.S.C. § 7571, to reduce aircraft emissions that endanger public health and welfare through the issuance of effective emission standards and associated compliance schedules, consistent with the Clean Air Act's comprehensive framework.

Amicus submits this brief in support of Petitioners.

SUMMARY OF ARGUMENT

The Aircraft Rule violates Section 231 of the Clean Air Act and is arbitrary and capricious.

1. The 1970 Clean Air Act Amendments (1970 Amendments) were intended to **reduce** air pollution that could reasonably threaten public health and welfare.

2. Section 231 was intended to **reduce** harmful aircraft emissions to protect public health and welfare, consistent with the overall intent of the 1970 Amendments.

3. The language of Section 231 effectuated Congress' intent. It required EPA to regulate aircraft emissions once the agency EPA determined they may cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health and welfare.

4. EPA's 2016 *Finding That Greenhouse Gas Emissions From Aircraft Cause or Contribute to Air Pollution That May Reasonably Be Anticipated To Endanger Public Health and Welfare* triggered the mandatory duty established by Section 231.

5. EPA's Aircraft Rule's failure to reduce greenhouse gas emissions as required by operation of Section 231 in light of EPA's *Endangerment Finding*, and EPA's reliance on non-statutory policy goals to justify its failure, were unlawful and arbitrary and capricious.

ARGUMENT

I. INTRODUCTION

Section 231 of the Clean Air Act, 42 U.S.C. § 7571, which was added by the 1970 Amendments, mandates that EPA issue aircraft emission standards for any air pollutant that may endanger public health and welfare.

On August 15, 2016, EPA issued its *Finding That Greenhouse Gas Emissions From Aircraft Cause or Contribute to Air Pollution That May Reasonably Be Anticipated To Endanger Public Health and Welfare*, 81 Fed. Reg. 54,422 (Aug. 15, 2016) ("*Endangerment Finding*"). That finding triggered the mandate of Section 231.

In 2021, EPA issued *Control of Air Pollution from Airplanes and Airplane Engines: GHG Emission Standards and Test Procedures*, purporting to comply with Section 231. 86 Fed. Reg. 2136 (Jan. 11, 2021).

Despite its obligation under the CAA to protect public health and welfare, the clear mandate of section 231, and EPA's own *Endangerment Finding*, EPA admits its Aircraft Rule will **not** reduce aircraft greenhouse gas ("GHG") emissions or the associated global threat to public health and welfare. The Aircraft Rule simply maintains the *status quo*. 86 Fed. Reg. at 2139, 2142, 2164.

Petitioners' challenge to the Aircraft Rule is meritorious.

EPA cannot ignore the clear mandate imposed by Section 231 and its *Endangerment Finding*. *Amicus* Jorling seeks to assure Congress' intent is implemented. EPA's rules must comply with the law. Its Aircraft Rule does not.

II. The CAA Was Intended to Impose Meaningful Emission Reductions to Protect Public Health and Remedy Failed Prior Attempts to Reduce Air Pollution

Understanding the historical legislative context of the 1970 Amendments is instructive when parsing Congress' intent in passing the Act in general and Section 231 specifically.

In 1970, Congress confronted twin problems: worsening air pollution and a history of prior inadequate legislative attempts to control it. The 1970 Amendments were meant to tackle both.

A. Worsening Pollution

In September 1970, Senator Edmund Muskie, Chairman of the Senate's Public Works Committee's Subcommittee on Air and Water Pollution and the chief proponent of the 1970 Amendments in the Senate, explained the need for new legislation: "[W]e have learned that the air pollution problem is more severe, more pervasive, and growing faster than we had thought." 116 Cong. Rec. S.16090 (Sept. 21, 1970).

Worsening air quality prompted such concern that drafters of the 1970 Amendments called for a nationwide "war against air pollution." Harley Staggers,

Chairman of the House Interstate and Foreign Commerce Committee and the chief proponent of the 1970 Amendments in that body, declared, "The purpose of the legislation reported unanimously by your committee is to speed up, expand, and intensify the **war against air pollution** in the United States with a view to assuring that the air we breathe throughout the Nation is wholesome once again." House Debate On H.R. 17255 at 891(June 10, 1970) (emphasis added). He continued:

> [w]hile the basic strategies in the Nation's war against air pollution must be developed in a unified and consistent way by the Federal Government, the implementation and enforcement of these strategies will have to be effected in every community in the United States. Therefore, prompt and effective regional, State, and local efforts are needed to win the campaign for clean air.

Id., at 795 (emphasis added).

The House Report of June 3, 1970, echoed the war metaphor. It stated, the "the war against air pollution will be carried on throughout the Nation rather than only in particular geographical areas."[1] *Id.*

Alarm over worsening air pollution was prompted, in part, by the release of documents analyzing five major air pollutants (sulfur oxides, particulates, carbon monoxide, hydrocarbons and oxidants), and reporting that air quality was deteriorating more rapidly than previously believed. Senate Report 91-1196 on S. 4358 (Sept. 17, 1970) at 1. This prompted Senator Muskie to tell the 1970 Senate

[1] *See* also *Id.*, at 796, 803, 806, 814, 815, 834, 891, 892, and 905.

Conference, "[w]e have learned from the criteria documents issued for five pollutants that more decisive action must be taken." *Id.,* at 16090.

New research about the harms of air pollution only confirmed the need for further legislative action to counter air quality deterioration. The Senate Report of September 17, 1970, for example, detailed new data showing carbon monoxide concentrations in Chicago were at levels damaging to public health more than 22 percent of the time, a problem shared by many other cities. 116 Cong. Rec. S 20597 (Dec. 18, 1970).

Senator Gaylord Nelson captured the concerns of many members when he stated, "For more than a quarter century, scientists have been issuing alarms about the rapidly deteriorating quality of this thin envelope of air surrounding our planet. They have warned that the trend must soon be reversed to avert disaster." He added, "Already the health of tens of millions of people is being compromised by air pollution, and life shortened for millions more." 116 Cong. Rec. S 12613 (Aug. 3, 1970) (Remarks by Mr. Nelson).

A statement by then Secretary of Health Education and Welfare John Garner warned there was "no doubt air pollution was a contributing factor in rising occurrence of chronic respiratory diseases. . .." *Id*., at 12613-12614.

Florida Congressman Paul Rogers likewise indicated that an air pollution health crisis was underway, describing parts of the county where "if we continue

along the same lines which we have for the past decade, we have been warned that mass deaths may result in this decade. . .. Indeed, these forecasts are already ringing true." 116 Cong. Rec. H 5356 (June 10, 1970). Kentucky Congressman Tim Lee Carter recounted during the House debate that "[m]any instances of widespread serious illnesses have followed protracted periods of extreme pollution," citing episodes in London, New York City, Los Angeles, and Donora, Pennsylvania. *Id*. at 5363.

This and other new information, "intensified the committee's concern to authorize a massive attack on air pollution." Extending their war on-on-pollution metaphor, Congressmembers explained that the 1970 Amendments were "designed to provide the basis for such an attack." Senate Report 91-1196 on S4358 at 1 (Sept. 17, 1970). This attack was intended to fortify the well-intentioned but too-timid air pollution control legislation preceding the 1970 Amendments.

B. Inadequate Pollution Control Legislation 1955-1970

Congress enacted much more restrictive and prescriptive air pollution control legislation in 1970 than ever before because it realized that the Clean Air Act iterations from 1955-1970 were ineffective at protecting the public health and welfare.

Congress passed the first federal air pollution legislation, the 1955 Air Pollution Control Act, "in recognition of the dangers to the public health and

welfare," from air pollution, including harm to crops, livestock, and property. Pub. L. No. 84 – 159.

The 1955 Act was quite limited. It did not establish any federal regulations. Instead, it assigned the primary burden of air pollution regulation to the states. Federal involvement was confined to authorizing research and to providing technical and financial assistance to state and local governments to develop and execute "air pollution abatement research programs." Pub. L. No. 84 – 159.

By 1963, Congress recognized that this approach was insufficient. 1963 Amendments called for actual emission controls, marking a fundamental shift toward active regulation. These amendments still left the "primary responsibility" of regulating air pollution to "States and local governments." Pub. L. No. 88 – 206, § 1(a)(3). The Federal government was only given a role in inter-state pollution. *Id*.

Despite the shift toward emissions standards, Congress recognized in the ensuing years that air pollution control remained inadequate. Legislation was needed to toughen enforcement and increase Federal authority. 116 Cong. Rec. S20597 (December 18, 1970). As Senator Muskie explained during the 1970 Senate Conference,

> In 1963, the Congress recognized that the Federal Government could not handle the enforcement task alone, and that the primary burden would rest on States and local governments. However, State and local governments did not respond adequately to this challenge. Enforcement had to be toughened. More tools were needed. The Federal presence and backup authority had to be increased.

Id.

In 1965 Amendments, Congress empowered the Public Health Service to establish emission standards for new cars. Pub. L. No. 89 – 272, § 202(a). These standards were to be implemented only after the Service determined their economic and technical feasibility, however, *Id.,* which proved to be a major barrier to regulation.

In endeavoring to implement the 1965 Amendments, Congress "learned that tests of economic and technological feasibility," could compromise public health and led to "inadequate standards." 116 Cong. Rec. S20597 (December 18, 1970).

In 1967, Congress thus dramatically enhanced the federal government's role in air quality protection, fulfilling earlier calls for true emissions controls. Realizing research could not substitute for regulation, "Congress established procedures for the achievement and maintenance of federally approved regional standards of ambient air quality." *Id.*

No longer would primary responsibility for air pollution control be vested with states. Instead, federal ambient air quality standards protective of public health and welfare would be established, with state regulatory programs enforcing them. States were required to designate regional pollution control areas within eighteen months and obtain federal approval. States were thereupon directed to establish "plans for the implementation for achieving those standards (State

Implementation Plans, or "SIPS"), also subject to federal approval. Public Law 90-148 §108(c)(1).

But, just as prior Amendments were ultimately found wanting, so too over time were those of 1967. As a House Report summarized in 1970 when revisiting the Clean Air Act yet again:

> While a start has been made in controlling air pollution since the enactment of the Air Quality Act of 1967, progress has been regrettably slow. This has been due to a number of factors: (1) cumbersome and time-consuming procedures called for under the 1967 Act; (2) inadequate funding on federal, State and, local levels; (3) scarcity of skilled personnel to enforce control measures; (4) inadequacy of available test and control technologies; (5) organizational problems on the Federal level where air pollution control has not been accorded a sufficiently high priority, and (6) last, but not least, failure on the part of the National Air Pollution Control Administration to demonstrate sufficient aggressiveness in implementing present law."

H. Rept. 91 – 1164 on H.R. 17255 at 5 (Dec. 18, 1970).

Congress should enact the 1970 Amendments, the House Report argued, to "provide a much more intensive and comprehensive attack on air pollution," *Id.,* at 4.

During Senate debate, Senator Muskie summarized the legislative response to dual challenge Congress faced from worsening air pollution and prior legislative inadequacies:

> With these lessons in mind, the 1970 Bill … laid down "five sets of requirements for tougher standards and tighter enforcement" against polluters: 1) national ambient air quality standards; 2) national air quality goals: 3) rigorous standards for new sources; 4) granting EPA authority to prohibit emissions of hazardous substances; and 5) providing authority to set

> standards for "selected pollutants (not controlled by ambient air standards or by prohibiting hazardous substances).

116 Cong. Rec. S 20597 (Dec. 18, 1970).

The Senate Report recapped:

> In sum, this bill would extend the Clean Air Act of 1963 as amended in 1965, 1966, and 1967 to provide a much more intensive and comprehensive attack on air pollution. It would establish that the air is a public resource, and that those who would use that resource must protect it from abuse, to assure the protection of the health of every American.

Senate Report 91-1196 on S. 4358 at 4 (Sept. 17, 1970).

Both Houses of Congress recognized the need to respond in 1970 with a greater sense of urgency. The House Report accompanying the draft amendments stated the need for the legislation: "Effective pollution control requires both **reduction of present pollution** and **prevention of new significant pollution problems**." H. Rept. 91 – 1164 on H.R. 17255 at 6 (Dec. 18, 1970) (emphasis added).

Senator Muskie remarked that, "The bill we consider today, . . . faces the environmental crisis with greater urgency and frankness than any previous legislation." He added: "It is a tough bill, because only a tough law will guarantee America clean air. It is a necessary bill, because the health of our people is at stake." 116 Cong. Rec. S 16090 (Sept. 21, 1970).

III. The 1970 Amendments Were Intended to be Sufficiently Flexible to Protect Against Both Current and Future Air Pollution

A. Congress Stated Its Intent

Drafters of the 1970 Amendments explicitly intended them to meaningfully **prevent** and **control air pollution** because that was essential to protecting public health and welfare. The very first purpose listed in Section 101 of the 1970 Amendments is "to protect and enhance the quality of the Nation's air resources so as to **promote the public health** and welfare and the productive capacity of its population." 42 U.S.C. § 7401(b) (emphasis added). Accordingly, the Act states, "**[a] primary goal** of this chapter is to encourage or otherwise promote reasonable Federal, State, and local governmental actions, consistent with the provisions of this chapter, for **pollution prevention**." § 7401(c) (emphasis added).

Congress's findings show the 1970 Amendments intended to address the public health crisis described above. Congress found the "growth in the amount and complexity of air pollution brought about by urbanization, industrial development, and the increasing use of motor vehicles, has resulted in mounting dangers to the public health and welfare." § 7401(a).

Congress also found, "air pollution prevention (that is, the **reduction** or **elimination**, through any measures, of **the amount of pollutants produced or**

created at the source) and air **pollution control** at its source is the primary responsibility of States and local governments." § 7401(a)(3) (emphasis added).

Consistent with Congress' stated findings and purposes, the language of the Act itself explicitly mandates the "**prevention**" and "**reduction**" of air pollution. *See, e.g.*, §§ 7401-7405, 7411(a)(1), 7412(d)(2), 7521(a)(3)(A).

Congress knew the 1970 Amendments could impose significant, even drastic, costs. But, as the Senate Report of September 17, 1970, stated, "The protection of public health. . .will require major action throughout the Nation. Many facilities will require major investments in new technology and new processes. Some facilities will need altered operating procedures or a change of fuels. Some facilities may be closed." S. Rept. 91-1196 on S. 4358 at 2. (Sept. 17, 1970).

Shutting polluting facilities might be a severe price to pay for clean air, but Congress was willing to pay it to protect public health: "[T]he Committee determined that existing sources of pollutants either should meet the standard of the law or be closed down." *Id*., at 4.

B. The Act Implements a Flexible Structure Applying to a Range of Sources and Using a Variety of Tools.

Drafters intended for the Act to be sufficiently flexible to enable regulators to adapt to future conditions. Accordingly, they ensured the Act applied to a range

of sources and provided tools that could not only reduce current air pollution but prevent or reduce both contemplated future risks and unforeseeable ones.

Congress recognized that reducing air pollution required addressing specific pollutants from many sources. It also acknowledged that better control technologies had to be encouraged. A 1970 House Report states:

> In fashioning effective strategies in the campaign for clean air in the United States, the different pollutants which affect our health and welfare in different ways and in varying degrees of severity, and the different sources from which they emanate must be controlled. Effective technologies to reduce or eliminate particular pollutants must be developed.

H.R. Rept. 91-1146 on H.R. 17255 at 15 (1970).

By providing a variety of tools to reduce air pollution, the 1970 Amendments granted regulators flexibility to design unique solutions tailored to specific pollutants and geographic areas. Congress further made clear that the primary tools were to be emissions standards and compliance schedules. As Senator Muskie explained, the 1970 Amendments "[r]equir[ed] specifically that all air quality standards **include** emissions standards and **schedules for the implementation** of such standards." 116 Cong. Rec. 5966 (Mar. 4, 1970) (emphasis added). In other words, compliance schedules are inextricably linked to emission standards; compliance timelines must accompany standards to operationalize them.

In mandating standards and schedules, Congress completed the turnaround from its prior non-regulatory approach and sought to place responsibility for pollution reduction on polluters themselves:

> The bill would provide other important tools to protect public health . . .. By providing authority to prohibit the emission of pollutants which present a clear hazard to health, the bill **shifts the burden of proof to the polluter** to identify safe emission levels.

S. Rept. 91-1196, on S. 4358 at 3 (Sept. 17, 1970) (emphasis added).

Significantly, the legislation granted EPA authority to use the new law's primary pollution-control tool – emissions standards and associated compliance schedules – to any pollutant threatening public health and welfare for the first time. While the Act generally empowered states to craft locally tailored air pollution solutions for stationary sources, it restricted state authority for controlling mobile sources. *See* §§ 7416, 7543. The Act preempted states from regulating emissions from new motor vehicles.[2] §§ 7521(a)(1), 7543(a)-(b), and from regulating aircraft emissions. CAA Section 233, 42 U.S.C. § 7573.

In sum, the Act's purposes, language, tools, schedules, and cooperative federalism approach all underscore the framers' intent to create a flexible statutory design that empowered state and federal regulators to jointly clean up air pollution.

[2] Except for California, if it obtained a federal waiver and set standards stricter than the federal limits. §§ 7521(a)(1), 7543(a)-(b).

This included remedying past pollution, reducing future foreseeably harmful pollution, and responding to unforeseeable threats to air quality as they arose.

IV. Section 231 of the CAA Requires Meaningful Aircraft Emissions Reductions to Protect Health and Welfare

A. The Legislative History of Section 231 Demonstrates Congress Intended to Reduce Harmful Aircraft Emissions and Promote New Control Technologies

When debating the 1970 Amendments, Congress faced a choice between different House and Senate approaches to regulating aircraft emissions under Section 231. The chief difference was over pollution control technology.

Both houses supported improving technology. As mentioned above, the House Report called for it: "Effective technologies to reduce or eliminate particular pollutants **must be developed**." H. Rept. 91-1164 on H.R.17255 at 15 (Dec.18, 1970) (emphasis added). As also mentioned, Congress had learned from the 1965 Amendments, "that tests of economic and technological feasibility" compromised public health and led to "inadequate standards." 116 Cong. Rec. at S 20597 (December 18, 1970). However, the House version of Section 231 did not include technology-advancing language.

The Statement of the House Managers summarized the crux of the disagreement between the chambers: "The House bill required the Administrator of the Environmental Protection Agency, in prescribing such standards, to consider technological feasibility and economic costs." Under the Senate amendment, in

contrast, "the Administrator was not required to consider technological feasibility and economic costs in prescribing emission standards." H. Rept. 91 – 1164 on H.R. 17255 at 54-55 (Dec. 18, 1970).

Proponents of the Senate version of the bill opposed the House's inclusion of "technological feasibility and economic costs" as factors in "prescribing emissions standards" because they feared including them would impede the development of new pollution control technology; emission controls might be limited to **current** technology instead of encouraging the development of new, better abatement technology. As the Senate Report accompanying its bill explained, aircraft emission standards "should be a function of the degree of control required**, not the degree of technology available today**." S. Rep. No. 91-1196 at 24 (Sept. 17, 1970) (emphasis added).

The Senate language prioritized pollution reduction and encouraged development of new technological solutions by giving three new responsibilities to EPA: (1) to study and determine the effect aircraft emissions have on air quality and the technological feasibility of controlling them; (2) to hold public hearings in regions most negatively affected by aircraft emissions; and (3) to set effective dates that provide the time needed to develop and install the new technology. Section 231(a)(1), 42 U.S.C. § 7571(a)(1).

On March 20, 1970, the Senate Public Works Committee's Air and Water Pollution' Subcommittee and the Commerce Committee met in joint session. Senator Warren Magnuson declared the intent of Section 231was to "reduce air pollution from aircrafts to such a minimum that it would not be a problem." Significantly, he signaled that the solution would be new technology: "[W]e are trying to get as far as technology will take us in reducing . . . air pollution. You can do it easier with airplane engines than you can with surface transportation. This is the point." Senate Hearing Before Joint Meeting of the Subcommittee on Air and Water Pollution of the Committee on Public Works and the Commerce Committee on S. 3229, S. 3466, S. 3546 at 1164 (March 20, 1970).

Ultimately, the House-Senate Conference resolved the issue in favor of the Senate bill, dropping the House language and giving EPA the three new responsibilities included in the Senate version. 42 U.S.C. § 7571(a)(1).

Just as Congress recognized that stationary sources which could not meet emissions standards would have to close to protect public health, Congress reiterated in the aircraft provisions that protection of public health trumped current technological limitations and economic costs.

Having settled the dispute between the House and Senate, Congress enacted Section 231, mandating that EPA issue emissions standards for aircraft engines:

> **(2)(A)** The Administrator **shall**, from time to time, issue proposed emission standards applicable to the emission of any air pollutant from any class or

> classes of aircraft engines which in his judgment causes, or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare.

By using the term "shall," in this section, consistent with that mandatory term's use throughout the Act, Congress unambiguously placed a duty on EPA to set standards for aircraft emissions reduction. As a district court explained in interpreting the provisions of Section 231, "These provisions, all of which use compulsory language, together create a comprehensive scheme for the regulation of harmful aircraft emissions, of which paragraph 231(a)(2)(A) is the centerpiece: no other provision provides for the development of aircraft emissions standards." *Ctr. for Biological Diversity*, 794 F. Supp. 2d at 160.

B. Congress Was Aware Air Pollution Could Cause Climate Change

Congress intended, through the 1970 Amendments, to create a regulatory structure flexible enough to tackle future air pollution risks both foreseen and unforeseeable. One threat that was foreseen during debate on the 1970 Amendments was air pollution's deleterious effect on global climate. However, Congress was aware the effects of air pollution on climate were not well understood; there were uncertain and sometimes contradictory data.

In March 1970, the Senate Public Works Subcommittee on Air and Water Pollution held hearings on three forerunners to the bill that eventually became the 1970 Amendments. Senator Jennings Randolph, Chairman of the Public Works

Committee, entered into the record a study about pollution resulting from burning fossil fuels. It discussed, among other things, the impact of fine particulate pollution on global climate: "[F]ine particulates tend to remain in suspension in the upper atmosphere," the study said, where their buildup could inhibit global solar radiation and "produce unacceptable worldwide climate changes." Senate Hearing Before the Subcomm. on Air and Water Pollution of the S. Comm. on Pub. Works on S. 3229, S. 3466, and S. 3546, Cong. 1 (Mar. 17, 1970).

Senator Caleb Boggs, the ranking minority member of the Public Works Committee's Subcommittee on Air and Water Pollution, entered into the record a speech given by Thomas C. Mann, President of the Automobile Manufacturers Association, titled "Clean Air and the Automobile." In it, Mann discussed the scientific uncertainty surrounding climate change, noting that there were contradictory theories. One researcher theorized that air pollution could trap energy from the sun, causing polar ice caps to melt and resulting in flooding and other calamities. Another "reached the opposite conclusion—that air pollution, by reflecting the sun's rays away from the earth, would cool the earth and lead to the formation of glaciers, icebergs and ice. *Id.*

Senator Boggs also entered into the record two excepts from the August 1970 *First Annual Report* of the Council on Environmental Quality ("CEQ"). CEQ

had been established under the 1970 National Environmental Policy Act ("NEPA") to develop national policies for improving environmental quality.

The first excerpt was the *Annual Report's* effective preface, President Nixon's February 10, 1970, message to Congress on the environment. Nixon wrote that conservation was not enough. "[N]o longer is it enough to conserve what we have; we must also restore what we have lost. We have to go beyond conservation to embrace restoration." 116 Cong. Rec. S 16101 (Sept. 21, 1970).

Senator Boggs also entered into the record Chapter IV of the CEQ *Report*, the chapter on air pollution. It states unequivocally, "The most important effect of air pollution is its threat to human health." *Id.*, at 16102. Chapter IV detailed the harmful effects of air pollution on human health, vegetation, visibility, and climate. The climate subsection stated, "Air pollution alters climate and may produce global changes in temperature. Chapter V of this report deals with that subject." *Id*., at 16103.

Although Senator Boggs did not include excerpts from Chapter V, the final bullet point in Chapter IV's section, "What Needs To Be Done," refers to it again: "As discussed in Chapter V, the addition of particulates and carbon dioxide in the atmosphere could have dramatic and long-term effects on world climate. The United States should take the initiative in forming cooperative arrangements to control air pollutants that could have widespread effects." *Id*., at 16106.

Senator Boggs also submitted a statement by Senate minority leader Hugh Scott, warning that if air pollution was not reduced, "scientists tell us we may very well experience irreversible atmospheric and climatic changes capable of producing a snowballing adverse effect to the health and safety of our citizens." 116 Cong. Rec. 33102 (1970).

Senator Muskie cautioned that every year air pollution would "destroy more plant and animal life and threaten irreversible atmospheric and climatic changes." He also quoted Nixon's statement that "[u]nless we arrest the depredations that have been inflicted so carelessly on our natural systems . . . we face the prospect of ecological disaster." *Id*., at 32901 (1970).

Despite scientific uncertainty regarding climate change in 1970, legislative history makes clear that Congress was aware of and deeply concerned about the threat air pollution posed to climate and, in turn, to public health and welfare. Congress was also aware the risk to global climate would intensify in future if the pollution that caused it continued unabated.

The 1970 Amendments were thus intended to provide a regulatory response to both widely known and emerging threats from air pollutants that endangered public health and welfare. Aircraft GHGs are the perfect example. At the time the 1970 Amendments were considered, air pollution was known to impact climate but the causal mechanisms were not well understood. By 2016, the science had

advanced sufficiently for EPA to issue its *Endangerment Finding*—exactly the type of health-protective regulatory response that Section 231 envisioned, and indeed required.

C. EPA Abdicated its Statutory Responsibility to Set Protective Aircraft GHG Standards.

EPA's 2016 *Endangerment Finding* stated that aircraft GHGs endanger public health and welfare. 81 Fed. Reg. 54,422 (Aug. 15, 2016). Identifying GHGs as such a threat triggered 42 U.S.C. § 7571(a)(2)(A): the EPA Administrator "shall," (i.e., "must") promulgate emission standards and associated compliance schedules. *Id*.

In plain dereliction of this mandatory duty, EPA has utterly failed to set meaningful emission standards applying to aircraft GHGs. The rule, by EPA's own admission, will trigger **no reduction** of GHG. 86 Fed. Reg. at 2139, 2142, 2164. It will simply continue business as usual in contravention of section 231.

In disregarding its duty, EPA ignored the Supreme Court's reasoning in *Massachusetts v. EPA*, 549 U.S. 497 (2007). In that case, the Supreme Court considered whether EPA could regulate auto-exhaust greenhouse gases under Section 202 of the Clean Air Act. EPA cited several policy reasons for not regulating vehicle GHG emissions. These included, among other things, that: voluntary executive branch programs already provided an effective response; regulation might impair the President's ability to negotiate GHG reductions with

developing countries; and greenhouse gas regulation under section 202 would be an inefficient approach to remedy climate change. *Id*.

The Supreme Court rejected these policy considerations as irrelevant to EPA's statutory obligation: "Although we have neither the expertise nor the authority to evaluate these policy judgments, it is evident they have nothing to do with whether greenhouse gas emissions contribute to climate change." *Id.*at 533.

The Court reasoned that GHGs must be among the pollutants that EPA may regulate to protect air quality, writing that, "greenhouse gases fit well within the Clean Air Act's capacious definition of 'air pollutant.'" *Id*., at 533.

More broadly, the Supreme Court wrote:

> While the Congresses that drafted § 202(a)(1) might not have appreciated the possibility that burning fossil fuels could lead to global warming, they did understand that without regulatory flexibility, changing circumstances and scientific developments would soon render the Clean Air Act obsolete. The broad language of § 202(a)(1) reflects an intentional effort to confer the flexibility necessary to forestall such obsolescence.

Id. at 532.

Massachusetts v. EPA is especially apt here. As in that case, EPA has here effectively decided not to regulate mobile-source GHGs. As with its failure to justify its inaction in *Massachusetts*, EPA cannot not justify its flouting of a mandatory statutory duty by relying on extra-statutory policy considerations. *Id*., at 533.

And as in *Massachusetts*, while Congress could not have fully foreseen the impact fossil fuels have on climate, it understood regulatory flexibility was necessary to account for both changed circumstances and advances in scientific understanding of the effects of air pollution. The broad language of Section 231, like that of Section 202, reflects a corresponding effort to confer the flexibility necessary to prevent the regulation from becoming obsolete.

In violation of Section 231, EPA in its final Aircraft Rule has unlawfully—and considering the present climate emergency, tragically—authorized aircraft to continue emitting GHGs unabated. The Rule thus fails to limit GHGs to protect the public health and welfare as the statute compels. 86 Fed. Reg. at 2139, 2142, 2164.

Finally, EPA's failure to issue a rule reducing aircraft GHG pollution defies common sense. As this Court stated in *Nat. Res. Def. Council v. EPA*, 725 F.2d 761, 770 (D.C. Cir. 1984), "the **primary emphasis** of any air pollution control program must be on the **reduction of air pollution**." (emphasis added). EPA's inaction on controlling aircraft emissions is a betrayal of that basic regulatory principle.

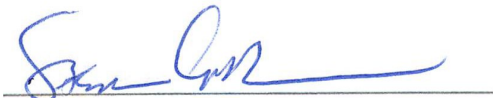
CONCLUSION

For the reasons set forth here, and in the Environmental Petitioners' brief, the Aircraft Rule violates the Clean Air Act. For the reasons set forth here and in

the State Petitioners' brief, the Aircraft Rule is arbitrary, capricious, and an abuse of EPA's discretion. Accordingly, the Court should grant the Petitions for review and direct EPA to propose aircraft GHG emissions standards supported by the statutory factors in Section 231 and the record.

Dated: March 23, 2022

Respectfully submitted,



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CERTIFICATE OF COMPLIANCE

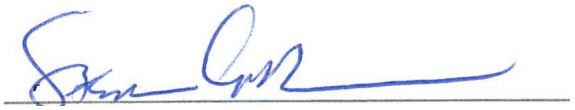
I hereby certify that the foregoing brief is printed in Times New Roman 14-point font. According to the Microsoft Word word-counting utility, this brieft contains 5596 words, exclusive of the Statement Regarding Separate Briefing; Certificate As To Parties, Rulings And Related Cases; Table Of Contents; Table Of Authorities; signature lines; and Certificates Of Service And Compliance.

CERTIFICATE OF SERVICE

I hereby certify that on March 23, 2022, I electronically filed the foregoing brief with the Clerk of the Court for the United States Court of Appeals for the District of Columbia Circuit using the appellate CM/ECF system, which served a copy of the document on all counsel of record in the case.

Dated: March 23, 2022

Respectfully submitted,



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