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Ms. Cheryl Laskowski
Chief, Transportation Fuels Branch
Industrial Strategies Division
California Air Resources Board
P.O. 2815
Sacramento, CA 95812

Re: Airlines for America® Input on the December 7, 2021, Low Carbon Fuel Standard Public Workshop – Potential Future Changes to the LCFS Program

Dear Ms. Laskowski:

Airlines for America® (A4A), the principal trade and service organization of the U.S. airline industry,[1] appreciates the opportunity to provide feedback on the California Air Resources Board's (CARB) December 7, 2021, public workshop on potential future changes to the Low Carbon Fuel Standard (LCFS) Program.[2]

By way of background, the U.S. airline industry has a strong climate change record and a continuing commitment to further reduce its climate impact. Between 1978 and the end of 2019, the U.S. airlines improved their fuel efficiency by 135 percent, saving over 5 billion metric tons of carbon dioxide (CO_2) – equivalent to taking 27 million cars off the road on average *in each of those years*. Taking a more recent pre-pandemic snapshot, data from the Bureau of Transportation Statistics confirm that U.S. airlines improved their fuel- and CO_2-emissions efficiency by 40 percent from 2000 to 2019.

This environmental record is not happenstance, but the result of a relentless commitment to driving and deploying technology, operations, infrastructure, and sustainable aviation fuel (SAF, or as CARB refers to it, alternative jet fuel (AJF)) advances to provide safe and vital air transport as efficiently as possible within the constraints of the air traffic management system. Indeed, for the past several decades, airlines have dramatically improved their fuel efficiency and reduced their CO_2 and other emissions by investing billions in fuel-saving aircraft and engines, innovative technologies like winglets (which improve aerodynamics), and cutting-edge route-optimization software.

[1] A4A's members are: Alaska Airlines, Inc.; American Airlines Group Inc.; Atlas Air, Inc.; Delta Air Lines, Inc.; Federal Express Corporation; Hawaiian Airlines, Inc.; JetBlue Airways Corp.; Southwest Airlines Co.; United Airlines Holdings, Inc.; and United Parcel Service Co. Air Canada, Inc. is an associate member.

[2] *See* https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-meetings-and-workshops.

We are committed to limiting and further reducing our industry's greenhouse gas (GHG) emissions. Since 2009, A4A and our members have been active participants in a global aviation coalition that committed to 1.5 percent annual average fuel efficiency improvements through 2020, with goals to achieve carbon-neutral growth beginning in 2020 and a 50 percent net reduction in CO_2 emissions in 2050, relative to 2005 levels. On March 30, 2021, A4A announced a significant strengthening of these climate commitments.[3] Together with our member carriers, we pledged to work across the aviation industry and with government leaders in a positive partnership to achieve net-zero carbon emissions by 2050.[4] With consistent analyses showing that tremendous quantities of SAF must be deployed for the industry to meet its climate goals, A4A carriers also pledged to work with the government and other stakeholders toward a rapid expansion of the production and deployment of commercially viable SAF to make 2 billion gallons available to U.S. aircraft operators in 2030. On September 9, 2021, as a complement to the federal government's announcement of a SAF "Grand Challenge," A4A and its members increased the A4A SAF "challenge goal" by an additional 50 percent, calling for 3 billion gallons of cost-competitive SAF to be available to U.S. aircraft operators in 2030.[5] Notably, this SAF goal and the net-zero by 2050 goal represent collective minimums, and several A4A members have in fact established even more ambitious SAF and climate goals.

The efforts our airlines are undertaking to further address GHG emissions are designed to limit their fuel consumption, GHG contribution, and potential climate change impacts responsibly and effectively, while allowing commercial aviation to continue to serve as a key contributor to the U.S., global, California, and local economies. At the same time, we continue to build upon our strong record of reducing conventional air pollutant emissions. Airlines' primary focus is realizing further fuel efficiency and emissions savings through increasing levels of SAF deployment, modernization and optimization of the air traffic management system, public-private research and development partnerships, and a vast array of additional operational and infrastructure initiatives being undertaken by airlines together with regulators, airports, manufacturers, and other aviation stakeholders. A4A and our members have been particularly focused on developing low-carbon, sustainable liquid fuel alternatives, understanding that the deployment of SAF will play an important role in achieving our climate goals.

As drop-in fuel that can reduce lifecycle GHG emissions by up to 80% while also helping to improve local air quality, SAF is particularly vital since, unlike the on-road transportation sector (cars, trucks, buses, etc.), the aviation sector cannot electrify in the near- term and therefore will remain reliant on liquid fuels for years to come. For well over a decade, A4A and its carriers have been working diligently to lay the groundwork for the establishment of a commercially viable SAF industry. In 2006, we were instrumental in creating the Commercial Aviation Alternative Fuels Initiative® (CAAFI), which seeks to facilitate the development and deployment of SAF. CAAFI has played an integral role in obtaining the certification of the seven SAF "pathways" that are now recognized under the ASTM International specification for

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[3] *See* https://www.airlines.org/news/major-u-s-airlines-commit-to-net-zero-carbon-emissions-by-2050/.

[4] On October 4, 2021, the International Air Transport Association and its member airlines followed suit by also committing to achieve net-zero carbon emissions by 2050. *See* https://www.iata.org/en/pressroom/2021-releases/2021-10-04-03/.

[5] *See* https://www.airlines.org/news/u-s-airlines-announce-3-billion-gallon-sustainable-aviation-fuel-production-goal/.

aviation turbine fuel from alternative, non-petroleum sources (i.e., ASTM D7566). Nearly all of A4A's member carriers, moreover, have entered into offtake agreements over the years with SAF producers in a concerted effort to spur the SAF industry and utilize the fuel. These offtakes include those of United Airlines, which has been procuring SAF from the World Energy facility in Paramount, CA for use at LAX since 2016, and Alaska Airlines, American Airlines, and JetBlue, which have been using SAF at SFO since 2020 (and in JetBlue's case, also at LAX since 2021). It bears noting, too, that A4A was the original proponent and a key supporter of CARB's addition of AJF to the LCFS Program as a credit-generating fuel on a voluntary, opt-in basis.[6] In sum, we have been and remain deeply committed to the development of a commercially viable SAF industry in California (and elsewhere).

With the above background in mind, A4A greatly appreciates CARB's past and ongoing support for AJF, and we look forward to working with CARB on measures that will rapidly expand availability and deployment of AJF in California. Any such measures, however, must be consistent with federal law. Accordingly, A4A's feedback on the December 7, 2021, public workshop focuses on one aspect of the presentation CARB staff made during the workshop: the potential addition of intrastate conventional jet fuel (CJF) as a deficit-generating fuel under the LCFS Program.[7] As explained more fully below, CARB does not have the legal authority to subject CJF used in intrastate flights to annual carbon intensity (CI) reduction requirements, so we respectfully ask that this potential regulatory change be given no further consideration by CARB staff.[8]

CARB Cannot Subject Intrastate CJF to the LCFS Program

CJF, which is defined in section 95481(a)(33) of the LCFS regulation, is currently exempt from the LCFS Program through section 95482(c)(2). When it proposed and then finalized this exemption as part of the 2018 LCFS rulemaking, CARB stated, correctly, that "[s]ubjecting aircraft fuels to annual carbon intensity standards would raise federal preemption issues."[9] CARB then pointed out that it "has the authority to amend the LCFS regulations to create incentives to promote the use of low carbon fuels in aircraft by allowing credit for such fuels. By promoting the voluntary production and use of alternative jet fuel, CARB would not be regulating aircraft fuels, but rather would simply be creating opportunities for airlines to better support

[6] Since becoming creditable under the LCFS Program in 2019, over 9.8 million gallons of AJF have been uploaded to aircraft in California. *See* https://ww2.arb.ca.gov/sites/default/files/2021-12/quarterlysummary_103121.xlsx.

[7] A4A and our members expressly reserve the right to amend or supplement this feedback by filing detailed comments if and when this particular change or any other revisions of the LCFS regulation are formally proposed by CARB.

[8] If CARB were to move forward with this potential regulatory modification, it would certainly need to explain in sufficient detail why it believes it has the legal authority to subject intrastate CJF to annual CI limits.

[9] *See* https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2018/lcfs18/isor.pdf?_ga=2.259407882.1202437490.1641231788-253234234.1573227006 at III-30.

California's GHG objectives."[10] A4A fully supported CARB's continuation of the non-deficit generating status of CJF (which was originally set forth in section 95480.1(d)(1) of the LCFS regulation before being moved to section 95482(d)(4)) and its inclusion of AJF as a credit-generating fuel under the LCFS Program on a voluntary, opt-in basis.[11]

The exemption in section 95482(c)(2) is expansive and encompasses all CJF, whether used in intrastate flights or any other flights taking off from California airports. Nothing has changed since the 2018 LCFS rulemaking, meaning California, like every other state in the country, continues to be federally preempted from regulating jet fuel irrespective of a flight's destination. Put another way, CARB remains subject to federal law that clearly preempts any authority other than the Federal Aviation Administration (FAA) from regulating aviation fuel, and CARB is compelled to maintain the scope of 95482(c)(2) to include CJF used for intrastate flights.

Federal law has for many decades made clear that the FAA has exclusive jurisdiction over jet fuel:

> The Administrator of the [FAA] shall prescribe-
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> (1) standards for the composition or chemical or physical properties of an aircraft fuel or fuel additive to control or eliminate aircraft emissions the Administrator of the Environmental Protection Agency decides under section 231 of the Clean Air Act (42 U.S.C. 7571) endanger the public health or welfare; and
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> (2) regulations providing for carrying out and enforcing those standards.[12]

Congress added this provision to the Federal Aviation Act of 1958 via the Clean Air Amendments of 1970, and courts have long held that the Federal Aviation Act of 1958 creates a "uniform and exclusive system of federal regulation" of aircraft that preempts state and local regulation.[13] This recognizes the critical importance of ensuring aircraft operations are not subject to a patchwork of state and local laws. It also recognizes the critical importance that maintaining the integrity of aviation fuel has to maintaining the safety of aircraft operations. Quite simply, Congress recognized the need to ensure the FAA had sole and exclusive authority to regulate aviation fuels.

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[10] *Id*.

[11] We incorporate by reference the comments we filed during the 2018 LCFS rulemaking, "Comments on the 2018 Amendments to the Low Carbon Fuel Standard" (April 23, 2018), and "Airlines for America's Comments on Proposed Modifications to the Proposed Revisions to the Low Carbon Fuel Standard (LCFS) Regulation" (July 5, 2018).

[12] *See* 49 U.S.C. § 44714 ("Aviation fuel standards").

[13] *See Burbank v. Lockheed Air Terminal, Inc.*, 411 U.S. 624, 639 (1973); see also *American Airlines v. Department of Transp.*, 202 F.3d 788, 801 (5th Cir. 2000) (aviation regulation is an area where "[f]ederal control is intensive and exclusive") (quoting *Northwest Airlines, Inc. v. Minnesota*, 322 U.S. 292, 303 (1944)).

Moreover, section 233 of the Clean Air Act explicitly preempts states and their political subdivisions from "adopt[ing] or attempt[ing] to enforce any standard respecting emissions from any aircraft or engine thereof unless such standard is identical to a standard" established under section 231,[14] which requires that the FAA be consulted on any aircraft ***engine*** emission standards proposed by the U.S. Environmental Protection Agency (EPA).[15]

EPA, for its part, has openly acknowledged that FAA has exclusive authority over aviation fuel. In a 2012 response to a rulemaking petition requesting that EPA address the lead content of fuel used in piston-engine general aviation aircraft, EPA explained as follows:

> EPA has no direct authority on setting . . . aviation fuel specifications by regulation. Rather, FAA has authority to prescribe standards for the composition or chemical or physical properties of aircraft fuels to control or eliminate aircraft emissions. 49 U.S.C. 44714. However, under current practice, these specifications are not set directly by government regulation. Rather, FAA indirectly regulates aircraft fuel by specifying that fuel meeting specifications identified by the aircraft engine manufacturer as part [of] the engine type certificate . . . must be used by the operator as a condition of operating the aircraft under its type certificate. Thus, while EPA has an interest in environmentally compatible fuels, our direct role here is limited to setting an engine emission standard under [Clean Air Act] section 231 that can be met, within appropriate leadtime, with the development and application of requisite technology, giving appropriate consideration to the cost of compliance and to safety and noise factors.[16]

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[14] *See* 42 U.S.C. § 7573; 40 C.F.R. § 87.3(d).

[15] 40 C.F.R. § 87.3(a) (EPA emission standards "apply to engines on all aircraft that are required to be certificated by FAA").

[16] *See* EPA, *Memorandum in Response to Petition Regarding Lead Emissions from General Aviation Aircraft Piston-Engines*, at 16 (July 18, 2012) (footnote omitted) (emphasis added), available at https://www.epa.gov/sites/default/files/2016-09/documents/ltr-response-av-ld-petition.pdf; *see also* 75 Fed. Reg. 22440, 22441 (Apr. 28, 2010) ("Under the [Clean Air Act], if, in the Administrator's judgment, lead emissions from the use of leaded avgas cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, then EPA would be required under our statutory authority to prescribe standards to control the emissions of lead from piston-engine aircraft. In promulgating such standards, the EPA would be required to consult with the [FAA], and could not change standards if doing so would significantly increase noise and adversely affect safety. FAA would then be required, after consultation with EPA, to prescribe regulations to [e]nsure compliance with any standards to control the emissions of lead from piston-engine aircraft. ***Under 49 U.S.C. 44714, FAA would also be required to prescribe standards for the composition or chemical or physical properties of piston-engine fuel or fuel additives to control or eliminate aircraft lead emissions***.) (emphasis added); *id.* at 22445-46 ("**fuels used exclusively in aircraft engines are to be regulated by the FAA**") (emphasis added); National Academies of Sciences, Engineering, and Medicine, *State and Federal Regulations That May Affect Initiatives to Reduce Airports' GHG Emissions*, at 15 (2012) (footnote omitted) ("EPA's authority to establish [aircraft emission standards] under the [Clean Air Act] does not extend to the

A4A very much appreciates and applauds CARB's desire to "help spur demand for [SAF] in California . . . and provide a stronger market signal to transition from fossil fuels to [SAF],"[17] and we will continue to work with and support CARB efforts to rapidly expand the availability and deployment of SAF. However, CARB is legally precluded from adding intrastate CJF as a deficit-generating fuel and thereby subjecting it to the LCFS Program's annual CI limits. Again, should CARB nevertheless move forward with this potential regulatory change, it certainly needs to explain in sufficient detail why it believes it has the legal authority to subject intrastate CJF to annual CI limits.

* * *

Thank you for your consideration of our feedback. Please do not hesitate to contact us if you have any questions.

Sincerely,

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regulation of jet fuel. Rather, FAA has exclusive authority to prescribe 'standards for the composition or chemical or physical properties of an aircraft fuel or fuel additive to control or eliminate aircraft emissions' for pollutants EPA has found endanger the public health and welfare"), available at https://www.nap.edu/cart/download.cgi?record_id=22671.

[17] *See* https://ww2.arb.ca.gov/sites/default/files/2021-12/LCFS%2012_7%20Workshop%20Presentation_notes.pdf at 13.