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March 16, 2017

Mr. Samuel Wade
Branch Chief, Transportation Fuels
California Air Resources Board
P.O Box 2815
Sacramento, CA 95812

Transmitted via Electronic Mail to LCFSWorkshop@arb.ca.gov

Re**:** Comments on Public Working Meeting on Inclusion of Alternative Jet Fuel

Dear Mr. Wade,

Airlines for America (A4A) appreciates the opportunity to provide comments for the record on the Air Resources Board (ARB) workshop on inclusion of alternative jet fuel in the Low Carbon Fuel Standard (LCFS).[1] A4A has consistently advocated before ARB for the inclusion of alternative jet fuel as an eligible credit-generating fuel under the LCFS, and we greatly appreciate ARB engaging with stakeholders to consider this important modification to the LCFS.[2] Such an approach would provide needed regulatory parity for alternative jet fuel, support the developing California advanced biofuels industry, lower the cost of compliance for obligated parties, and advance the State's environmental goals.

A4A and our members are part of a global aviation coalition that has committed to a 1.5% annual average fuel efficiency improvement through 2020 and carbon neutral growth from 2020, subject to critical aviation infrastructure and technology advances achieved by government and industry. The initiatives our airlines are undertaking to further address GHG emissions are designed to responsibly and effectively limit their fuel consumption, GHG contribution and potential climate change impacts, while allowing commercial aviation to continue to serve as a key contributor to the U.S. economy. At the same time, we continue to build upon our strong record of reducing emissions with local air quality impact.

The availability of sustainable alternative jet fuel in significant quantities is one key pillar to the achievement of our industry goals, and A4A and its members are working hard to lay the groundwork for the establishment of a sustainable alternative jet fuel industry. There is particularly great interest among biofuel producers and A4A members in producing and utilizing sustainable alternative jet fuel in the California market. Last year, United Airlines began using commercial quantities of alternative jet fuel at Los Angeles International Airport pursuant to an off-take agreement with AltAir fuels that contemplates the purchase of up to 5 million gallons per year over 3 years. United has also made a $30 million equity investment in Fulcrum BioEnergy that includes provisions to co-develop up to five facilities and purchase up to 90 million gallons per year over ten years. FedEx and Southwest Airlines have similarly committed to each purchase 3 million gallons per year from Red Rock Biofuels for use in Northern California. Other A4A members are also actively considering alternative jet fuel use in California.

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[1] A4A is the principal trade and service organization of the U.S. scheduled airline industry. A4A members are Alaska Airlines, Inc.; American Airlines Group (American Airlines and US Airways); Atlas Air, Inc..; Federal Express Corporation.; Hawaiian Airlines; JetBlue Airways Corp.; Southwest Airlines Co.; United Continental Holdings, Inc.; and United Parcel Service Co. Air Canada is an associate member.

[2] *See*, e.g., A4A's February 17, 2015, comments on LCFS Readoption.

Allowing alternative jet fuel producers to generate LCFS credits would significantly improve the economics of new and existing facilities by allowing them to generate credits from all transportation fuels produced. The AltAir facility, as well as other potential alternative jet fuel facilities, necessarily produces both renewable diesel and alternative jet fuel, along with other products. Given that the LCFS is intended to spur investment in the renewable fuels industry, we encourage ARB to strengthen this investment signal by allowing LCFS credit for all low carbon transportation fuels produced.

Incentivizing the production of alternative jet fuel is particularly appropriate in light of the critical role the airline industry can play in helping to obtain financing for facilities through dedicated off-take agreements, a role that the airline industry is uniquely situated to fill. Modeling conducted for A4A by the National Renewable Energy Laboratory (NREL) pursuant to NREL's Biomass Scenario Model, which will be presented by NREL at the March 17 working meeting on including alternative jet fuel in the LCFS, demonstrates the synergistic relationship that airline off-take agreements can have when coupled with access to the LCFS credit market. Notably, NREL's modeling indicates that an LCFS credit for alternative jet fuel could result in significantly increased production of both alternative jet fuel and renewable diesel.

Crediting alternative jet fuel as a cost-containment mechanism is also consistent with the direction in ARB Resolution 11-39 to explore "expansion of the LCFS credit trading market" and "incorporation of a flexible compliance mechanism…"[3] While ARB included several new forms of cost containment in the LCFS readoption, allowing alternative jet fuel to generate credits would further promote cost containment by enlarging the pool of credits available to obligated parties. In addition, crediting of alternative jet fuel could contribute to cost containment by providing an additional avenue for low carbon fuel use that is unaffected by ground transportation blending constraints.

We agree with ARB's general exemption of aircraft fuels from California's LCFS mandates.[4] Subjecting aircraft fuels to annual "carbon intensity" standards would raise serious federal preemption issues and would not be appropriate given the rigorous jet fuel specifications that make producing jet fuels a "higher hurdle" than producing ground-based fuels. However, ARB does have the authority to amend the LCFS regulations to create *incentives* to promote the use of alternative jet fuel in aircraft by allowing credit for such fuels. By promoting the voluntary production and use of alternative jet fuel, ARB would not cross the line into impermissibly regulating aircraft fuels, but rather would simply be creating opportunities for airlines to better support California's GHG objectives.

Notably, allowing alternative jet fuel to generate LCFS credits would be a measure fully in line with the U.S. Environmental Protection Agency's approach under the Renewable Fuel Standard (RFS) regulations. The RFS explicitly allows for the generation of Renewable Identification Numbers (RINs) for the production of alternative jet fuel, although the RFS appropriately does not mandate the production or use of any volume of alternative jet fuel.

A4A strongly urges ARB to adopt a similar approach to expand opportunities for new biofuel production facilities and create additional compliance flexibility for regulated parties. Given the strong interest in alternative jet fuel in California, we believe the time is ripe for ARB to include a provision crediting the production and use of such fuel.

Sincerely,

Alex Menotti
Director, Environmental Affairs

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[3] *See* Resolution 11-39, Amendments to the Low Carbon Fuel Standard Regulation, p. 9 (December 16, 2011).

[4] *See* Cal. Code Regs. tit. 17, § 95480.1(d) (2011).