Air Transport Association

February 10, 2008

BY ELECTRONIC SUBMITTAL

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Bob Epstein, Vice-Chair (bob@e2.org)
The Economic and Technology Advancement Advisory Committee
to the California Air Resources Board

Steve Church (schurch@arb.ca.gov)
Research Division
California Air Resources Board
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Re: Comments on Recommendations of The Economic and Technology Advancement Advisory Committee (ETAAC) FINAL DRAFT – Technologies and Policies to Consider for Reducing Greenhouse Gas Emissions in California (released February 7, 2008)

Dear Dr. Lloyd, Dr. Epstein and the Members of the ETAAC:

The Air Transport Association of America, Inc. (ATA)\(^1\) is pleased to have this opportunity to comment on the Final Draft report of the Economic and Technology Advancement Advisory Committee to The California Air Resources Board (the “ETAAC” or “Committee”), released February 7, 2008, and entitled Recommendations of The Economic and Technology Advancement Advisory Committee (ETAAC) FINAL DRAFT – Technologies and Policies to Consider for Reducing Greenhouse Gas Emissions in California (the “Final Draft”).

ATA thanks the Committee for the extraordinary amount of work and serious thought that has gone into the Final Draft; its quality and depth is a testament to this. ATA is generally supportive of the document, and, in particular greatly appreciates the Committee’s support for

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“RD&D investigating biofuels and other alternative fuels for use in aviation” and “[i]ncreases in Federal support for RD&D for advanced air traffic management systems.” Final Draft at 3-30 and 10-92, -93. As expressed in ATA’s comments on the Discussion Draft, ATA actively supports these efforts. ATA also again asks the Committee to recognize in the Final Report the critical need for increased government support of basic aeronautics research to move us toward breakthrough engine and airframe technologies that will be essential to significant future emissions reductions. ATA also respectively suggests that the Final Draft’s characterization of the reductions in aviation-related emissions from ATM systems as “modest” (p.3-30) incorrectly downplays this technology. Even the most conservative estimates are that improvements will generate at least a 10% reduction in such emissions.

Again, ATA greatly appreciates the Committee’s insightful recommendations to the Board on these matters. ATA has some general and specific concerns regarding the Final Draft, which are described in detail below.

POLICYMAKERS MUST UNDERSTAND THE ROLE AVIATION ACTUALLY PLAYS IN CLIMATE CHANGE, PARTICULARLY IN CALIFORNIA

- Aviation Emissions Account for Only 0.6% of Emissions Included in the AB 32 Cap
- Commercial Aviation Emissions Already Are 41% Below 1990 Levels, While Transporting 17% More Passengers and Over 400% More Cargo

As ATA noted in its comments on the Discussion Draft, commercial aviation accounts for only a small portion of GHG emissions, though it drives a much larger share of the GDP. ATA also pointed out that the commercial aviation sector has achieved this outstanding environmental performance by constantly improving fuel efficiency; few if any other sectors can match aviation’s record in this regard.

We want to be clear: aviation’s performance in California is even better. The Air Resource Board’s GHG Inventory shows the segment of commercial aviation emissions included in the AB 32 Cap (i.e., emissions from intrastate operations) accounts for just 0.6% of total emissions included in the California inventory, and is already 41 percent below 1990 levels.

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2 A copy of ATA’s comments on the Discussion Draft (released November 15, 2007) is available here: http://www.arb.ca.gov/cc/112907pubmeet/public_comments_and_handouts/pohle-ata_comments_on_ca_etaac_discussion_draft_report.pdf.


4 Compared to 2004, the last data point included in the latest Inventory data available from ARB. See California Greenhouse Gas Inventory (millions of metric tonnes CO2 equivalent) – By Sector and Activity (available at: http://www.arb.ca.gov/cc/inventory/data/tables/rpt_inventory_sector_activity_2007-11-19.pdf). A summary of these figures is provided in the Table A of the Appendix.
Stated another way, aviation emissions included in the AB 32 Cap would have to *grow 70%* to return to 1990 levels.\(^5\) At the same time, the contribution that commercial aviation has made to the economy has increased substantially. For intra-California operations, revenue passenger miles have grown 17% since 1990, while cargo (measured in revenue ton miles) increased 415%.\(^6\) Stated bluntly, *even as aviation’s GHG emissions in California have declined significantly in absolute terms, the volume of passengers and cargo transported has risen significantly.*

**THE COMMITTEE’S RECOMMENDATIONS MUST RECOGNIZE THE INHERENT PRACTICAL AND LEGAL LIMITS TO STATE AUTHORITY TO REGULATE GHG EMISSIONS FROM COMMERCIAL AVIATION**

It is important for the Committee to be mindful of the inherent practical and legal limits to California’s authority to regulate aviation-related GHG emissions. As ATA has detailed in a number of contexts, including in its comments on the Discussion Draft and its comments on the 1990 Statewide Greenhouse Gas Emissions Level and 2020 Emissions Limit, the states lack the legal authority to regulate aviation-related GHG emissions.\(^7\)

Perhaps even more compelling are the practical limits on state action. ATA addressed this issue in its extensive comments to The Climate Registry (TCR) concerning its General Reporting Protocol for the Voluntary Reporting Program.\(^8\) TCR’s draft protocol proposed relying on the purchase of jet fuel as a proxy for aircraft emissions (which we understand to be the California Inventory’s methodology as well). In its TCR comments, ATA explained the many drawbacks of reporting commercial aviation emissions based on where jet fuel is purchased, particularly because this will distort policy decisions. Most fundamentally, aircraft emissions do not occur where fuel is purchased. Accordingly, ATA advocates that any inventory/registry for aviation emissions should be done on a national basis at the federal level. Airlines already report comprehensive fuel consumption data to the Department of Transportation (via the Bureau of Transportation Statistics), and these data provide a basis for ascertaining total US emissions from aircraft.

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\(^5\) Including all inventoried aviation operations (those included in the AB 32 cap (intragastate operations) and those excluded from the cap (all other domestic and international)), emissions have *declined 13%* in absolute terms since 1990.

\(^6\) Comparisons are to 2004 (to coincide with ARB emissions data points). All economic activity data is from Air Transport Association of America, Inc., Economics Department. A summary of these figures is provided in the Table B of the Appendix.

\(^7\) ATA’s comments are available here: [http://www.arb.ca.gov/lists/ccei07/11-ata_comments_on_arb_ab_32_carbon_cap_reg.pdf](http://www.arb.ca.gov/lists/ccei07/11-ata_comments_on_arb_ab_32_carbon_cap_reg.pdf). ATA continues to oppose the inclusion of commercial aviation emissions (including those from intrastate operations) in the AB 32 Cap. In any event, however, the Committee’s recommendations should be scoped consistent with the Board’s decision to include only emissions from intrastate aviation operations.

SPECIFIC REQUESTS FOR CHANGES TO THE FINAL DRAFT

With this background, ATA respectfully requests that the Committee make the following specific changes to the Final Draft.

1. **Remove or Modify Statements Regarding Potential GHG Impact of Airport Development Projects and the Relative Merit of Supporting Other Modes**

   ATA previously asked that the assertion that “airport expansion plans” “tend[] to increase GHG emissions” (p. 3-4 (emphasis original)) be removed or at least further qualified. The Final Draft now also includes a more robust statement to the same effect:

   Airport expansion is another potential aviation infrastructure improvement, but will tend to increase air travel much more than improve operating efficiencies, allowing GHG emissions to increase. (p. 10-92)

   The Final Draft also includes two statements which imply that airport expansions necessarily will increase GHG emissions:

   Potential airport expansions should only be considered if the GHG emissions effects are justifiable due to other co-benefits. (p. 3-30).

   Potential airport expansions should only be considered if the GHG emission effects are considered justified. (p. 10-93)

   As pointed out in our prior comments, in many instances expansion of airport infrastructure will not increase air traffic demand but will reduce delays and congestion, thus reducing future emissions. The data presented in these comments, demonstrating that since 1990 aviation GHG emissions have decreased even as activity has increased, underscore the need to analyze the effects of any airport expansion project carefully before reaching conclusions about its potential impact. Policymakers also need to be aware that a presumption that airport expansion projects will require off-setting co-benefits is not justified. ATA encourages comprehensive analyses of all environmental impacts and co-benefits of potential airport expansion projects consistent with state and federal law. We therefore respectfully request that the cited statements be removed or modified appropriately.

   ATA is also concerned by the statement appearing on page 10-91 of the Final Draft that “significant GHG emissions reductions could take place by replacing intrastate air travel with high-speed, electric rail travel.” ATA objected to a similar statement in the Discussion Draft, pointing out that the assertion is not supported by any analysis, including consideration of emissions related to land use, construction and maintenance, and power supply for such a rail system. ATA again respectfully requests the statement be removed, especially in light of data presented in these comments demonstrating that intrastate aviation emissions account for just 0.6% of total emissions in California, and have declined 41% since 1990 even as the sector has substantially increased the amount of passengers and cargo transported.

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2. **Remove Discussion of Carbon-Based Landing Fees**

The Final Draft also retains statements regarding “carbon-based landing fees” suggesting that state and local authorities have the power to impose such fees. As detailed in ATA’s comments on the Discussion Draft (see fn. 2, *supra*), state and local authorities simply have no such power, and, accordingly, this discussion should be removed.

**CONCLUSION**

Again, ATA thanks and applauds the extraordinary service the Committee has provided in developing this document and for this opportunity to comment on the Final Draft.

Sincerely,

Tim Pohle  
Managing Director, U.S. Environmental Affairs &  
Assistant General Counsel

Attachment
APPENDIX
EMISSIONS AND ECONOMIC ACTIVITY DATA

Table A: GHG Emissions – Millions Metric Tonnes CO2 Equivalents (MMT CO2e)

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2004</th>
<th>Change 1990-2004</th>
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<tbody>
<tr>
<td>Gross California Emissions</td>
<td>433.29</td>
<td>484.40</td>
<td>+51.11</td>
</tr>
<tr>
<td>Included in the Inventory</td>
<td></td>
<td></td>
<td>+12%</td>
</tr>
<tr>
<td>Domestica Air Transport: Intrastate; Fuel Combustion – Jet Fuel</td>
<td>4.719 (1.1% of Gross)</td>
<td>2.804 (0.6% of Gross)</td>
<td>-1.915 -41%</td>
</tr>
<tr>
<td>Domestic Air Transport: Intrastate; Fuel Combustion – Jet Fuel (p. 7)</td>
<td>4.719 (1.1% of Gross)</td>
<td>2.804 (0.6% of Gross)</td>
<td>-1.915 -41%</td>
</tr>
<tr>
<td>Gross California Emissions</td>
<td></td>
<td></td>
<td>+6%</td>
</tr>
<tr>
<td>Included in the Inventory + Emissions Excluded in the Inventory (p.36)</td>
<td>519.89</td>
<td>550.93</td>
<td>+31.04</td>
</tr>
<tr>
<td>Aviation Emissions Excluded from Inventory (p.32)</td>
<td>33.954</td>
<td>32.916</td>
<td>-1.038 -3%</td>
</tr>
<tr>
<td>All Aviation Emissions Included in Inventory + Emissions Excluded from Inventory (p.32)</td>
<td>39.086 (8% of Gross)</td>
<td>33.966 (6% of Gross)</td>
<td>-5.120 -13%</td>
</tr>
</tbody>
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Table B: Revenue Passenger Miles (RPM) and Revenue Ton Miles (RTM)

<table>
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<tr>
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<tbody>
<tr>
<td>RPMs</td>
<td>RTMs</td>
<td>RPMs</td>
</tr>
<tr>
<td>Intra-California</td>
<td>5,600,917,576</td>
<td>17,795,063</td>
</tr>
<tr>
<td>California-Other</td>
<td>76,223,966,832</td>
<td>2,371,404,072</td>
</tr>
<tr>
<td>Total California</td>
<td>81,824,884,408</td>
<td>2,389,199,135</td>
</tr>
</tbody>
</table>

Source: Air Transport Association of America, Inc., Department of Economics (derived from T-100 Market data from U.S. Bureau of Transportation Statistics).