U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, DC 20515
July 25, 2011

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Chairman

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MEMORANDUM

TO: Members, Subcommittee on Aviation

FROM: The Honorable Thomas E. Petri, Chairman, Subcommittee on Aviation

SUBJECT: Hearing on the European Union's Emissions Trading Scheme: A Violation of International Law
Wednesday, July 27, 2011, 9 a.m. in room 2167 Rayburn House Office Building.

PURPOSE

The Subcommittee on Aviation will receive testimony from Federal government and industry witnesses regarding the European Union's Emissions Trading Scheme. The discussion will focus on the unilateral actions of the European Union ('EU") in applying their Emissions Trading Scheme ("ETS") to all civil aviation operations; the EU's actions and international law; and the impact of the EU's ETS on U.S. operators, the competitiveness of the U.S. aviation industry, and U.S. aviation jobs.

BACKGROUND

European Union's Emissions Trading Scheme

The European Union's Emissions Trading Scheme ("EU ETS") began in 2005 with the capping of emissions of carbon dioxide ("CO_2") from more than 10,000 stationary sources within the EU (covered sectors included: power plants; petroleum refining; iron and steel production; coke ovens; pulp and paper; and cement, glass, lime, brick, and ceramics production).[1] Under the ETS, the EU auctions a specified number of emissions allowances for each multi-year period, and distributes a certain number of allowances for free. A covered emitter is required to submit

[1] CRS Report RL34150, *Climate Change and the EU Emissions Trading Scheme (ETS): Kyoto and Beyond*, by Larry Parker (February 2008).

to regulatory authorities one allowance for each ton of CO_2 emitted during the period. There is an active market for allowance trading, in which the emitter may sell unneeded allowances to others or purchase whatever additional allowances it requires.[2]

Starting in January 2012, civil aviation operators landing in or departing from the EU will be included in the ETS.[3] This means that all segments of international flights to, within, and from the EU by U.S. air carriers would be subject to the ETS, including those portions over the United States, Canada, and international waters.

In 2012, the total quantity of emissions allowances would be equivalent to 97% of the aviation sector's average 2004-2006 emissions. In allocating the emissions allowed under the cap, 85% of the sector's 2012 allowances are to be given to aircraft operators at no cost, and 15% of the allowances are auctioned. In 2012, according to the International Air Transport Association (IATA), 212.9 million credits will be issued directly to airlines, 85%, or 181 million, for free, and 15% or 31.9 million will have to be purchased through auction. IATA also indicates that in 2012, airlines will have to purchase an additional 35.5 million allowances in the open market, assuming they are available, to cover growth. With the price of carbon in the EU currently € 13[4], the total cost to airlines in 2012 is estimated to be nearly $1.3 billion. The 2012 price of carbon in the EU is depressed due to the current economic crisis and is expected to rise. By 2020, the price is anticipated to reach € 50. Therefore, according to IATA, the EU ETS is estimated to cost airlines almost $1.3 billion in 2012 alone.

In 2013, the cap would be reduced to 95% of the aviation sector's average 2004-2006 emissions, with further reductions to be agreed on as part of the ongoing review of the ETS. The EU Commission has proposed that 80% of the aviation sector's allowances be distributed free of charge in 2013, with 20% being auctioned. The percentage of free allowances is expected to continue declining with a goal of auctioning all allowances in 2020. According to IATA, the cost estimate for the EU ETS goes up to $3.5 billion in 2020.

Operators emitting more than their allowed cap would need to buy additional allowances on the carbon market and the directive provides sanctions for failure to comply with the scheme. Sanctions include the possibility that a non-complying airline might be banned from operating in the EU.[5] Airlines will purchase allowances and pay penalties to the EU Member State to which they most frequently fly; the United Kingdom will be the Member State for most U.S. carriers.

Finally, under the EU ETS, if a country can show "equivalent measures" on CO_2 reduction from its airlines, then those airlines would not have to pay the carbon charge for one leg of their European roundtrip. However, the EU has provided no guidance on how to establish "equivalence" or what "equivalent measures" means.

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[2] CRS Report *European Aviation Policy Issues*, by Bart Elias (June 2011).

[3] ETS provides an exception for military aircraft, some small carriers, emergency services, research, and humanitarian flights.

[4] € = Euros

[5] CRS Report *European Aviation Policy Issues*, by Bart Elias (June 2011).

U.S. Government Position on ETS:

According to the Department of Transportation ("DOT"), the Department of State, and the Federal Aviation Administration "(FAA"), the U.S. is committed to addressing global climate change and believes that the International Civil Aviation Organization ("ICAO") policies, standards and recommended practices should provide the framework for measures to address international Greenhouse Gas ("GHG") emissions from international civil aviation. The U.S. Government ("USG") has made clear to its European counterparts, that it is the USG's responsibility and authority to determine the U.S. response to climate change. Currently, the USG is developing its response to climate change in conjunction with work being done in ICAO.

In June 2011, the United States presented its formal objection to the EU ETS at a half-yearly meeting in Oslo of the U.S.-EU Joint Committee created under the 2007 Air Transport Agreement on the liberalization of air service between the United States and Europe (commonly known as the "Open Skies agreement"), and which meets regularly for discussions on implementation of the agreement. The Open Skies agreement liberalized air service between the United States and Europe by, among other things, permitting U.S. and European air carriers to fly between any point in the European Union and any point in the United States.

USG objects to U.S. operators being subject to the EU ETS without the explicit agreement of the USG for any portion of their flights between airports of Member States of the EU and the U.S., as well as for other flights covered by the U.S.-EU Air Transport Agreement. This includes all preliminary impositions on U.S. operators such as monitoring, reporting and verification of emissions, not just surrendering of permits for such emissions.

According to the FAA, in response to the ICAO Assembly resolution with respect to aviation and climate change challenges, the USG is undertaking a set of initiatives under the U.S. Next Generation Air Transportation System ("NextGen"), as well as working at ICAO on such initiatives as the development of a meaningful CO_2 standard. According to FAA, the full implementation of NextGen could reduce greenhouse gas emissions from aircraft by up to 12 percent by 2025.[6] The USG also points out that the U.S. aviation sector has a strong record of fuel efficiency improvements and greenhouse gas emissions savings and continues to work with the government to advance technological, operational, infrastructure and alternative fuel opportunities for further improvements.

Based on system wide operations (both domestic and international) U.S. aviation fuel consumption and CO2 emissions have declined 15% between 2000 and 2010.[7] By comparison, based upon European greenhouse gas inventories submitted to the United Nations, the annual aviation CO_2 emissions for operations within the 27 European Union Member States were 12%

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[6] GAO report number GAO-08-706T, "Aviation And The Environment: NextGen and Research and Development Are Keys to Reducing Emissions and Their Impact on Health and Climate" (May 7, 2008).

[7] U.S. aviation emissions statistics for 2000 through 2010 were generated from FAA modeled data using the Aviation Environmental Design Tool (AEDT).

lower in 2009 compared to 2000, while CO_2 emissions for flights departing the 27 European Union Member States grew by 15%.[8]

Industry Lawsuit

In 2009, American, United, and Continental airlines, along with the Air Transport Association of America, filed a legal challenge to the EU ETS in the United Kingdom. The lawsuit was transferred to the European Court of Justice and arguments in the case began on July 5, 2011.

The U.S. airline industry has requested that the European Court of Justice ("ECJ") dismiss the European Union's application of an ETS on international civil aviation. The U.S. air carriers argue that aviation greenhouse gas emissions should be regulated on a global sectoral basis (i.e. only civil aviation sector of industry), and unilateral action by any country or group of countries violates international law. It is the air carriers' position that the EU is violating international law and several treaty provisions in the Chicago Convention. Pursuant to the Chicago Convention, countries have authority over airlines in their own airspace. Therefore, the air carriers argue that the EU ETS cannot regulate flights to and from Europe when they are not over Europe. The U.S. air carriers also dispute whether Europe can, under the Chicago Convention, regulate U.S. airlines as they fly over the high seas, or if Europe can levy charges on other country's airlines. Finally, air carriers argue that the levies imposed by the ETS violate the Kyoto Protocol which confirms that ICAO has the authority to establish greenhouse gas policy for international aviation. [9]

In its testimony before the ECJ, the ATA provided an example of the application of the EU ETS to a flight from San Francisco to London Heathrow. According to ATA, as a percentage of total emissions from this flight, 29% take place in US airspace, including those on the ground at the airport. Another 37% take place in Canadian airspace and a further 25% take place over the high seas. Only 9% of emissions take place in EU airspace (Attachment A provides a visual of this flight). But, the ATA pointed out that the ETS will impose a levy on the air carrier, and may also impose an excess emissions penalty, based on emissions for the entire flight from gate-to-gate.

The EU is defending its ETS and its interpretation of international law. The European Court of Justice is expected to rule at the end of 2011 or in early 2012.

EU Position on ETS

The EU indicates that it is leading global efforts to reduce greenhouse gas emissions from human activities and the ETS is the cornerstone of its strategy for cutting its own greenhouse gas

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[8] The European Environment Agency (EEA) submits greenhouse gas inventories to the United Nations in accordance with the Framework Convention on Climate Change (UNFCCC). The EU27 aviation statistics are from EEA. (see:http://dataservice.eea.europa.eu/pivotapp/pivot.aspx?pivotid=475) .

[9] *ATA Calls EU ETS Application to U.S. Airlines Illegal*," http://www.airlines.org/News/Releases/Pages/news_07-05-11.aspx (July 5, 2011).

emissions cost-effectively.[10] The European Commission believes using emissions trading to tackle emissions from the aviation sector is fully in line with the EU's international obligations and decisions taken by ICAO. [11] The European Commission created the Directorate-General for Climate Action ("DG CLIMA") in February 2010. DG CLIMA leads international negotiations on climate, helps the EU to deal with the consequences of climate change and to meet its targets for 2020, and develops and implements the EU ETS.[12] The European Commission would like to build a global carbon market and hopes to link up the ETS with compatible systems around the world to form the backbone of such a carbon market.[13]

The European Commission has estimated that auctioning could raise an EU-wide total of € 30-50 billion depending on the carbon price.[14] EU Member States have agreed that they should use at least 50% of this income to combat climate change, in both Europe and developing countries.[15]

ICAO Actions on Climate Change

Over the past few years, the international aviation community has agreed to the following measures to address the challenge of climate change through ICAO:[16] [17]

- A global goal of 2 percent annual improvement in fuel efficiency through 2050, and further exploration of the feasibility of more ambitious medium and long-term goals, including carbon-neutral growth and emissions reductions.
- The development of a global CO_2 standard for aircraft and facilitation of further operational changes to reduce aviation emissions.
- The development of a framework for market-based measures in international aviation.
- Elaboration on measures to assist developing States and to facilitate access to financial resources, technology transfer and capacity building.
- The submission of States' action plans, outlining their policies and actions, and annual reporting of data to ICAO on their aviation fuel consumption. ICAO is currently undertaking work in both these areas to assist ICAO Member States in fulfilling these requirements. This is the first case where a global industry has adopted mandatory emissions reporting requirements across both Annex-1 and non-Annex 1 countries.[18]

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[10] *EU action against climate change. The EU Emissions Trading Scheme*, European Commission (2009 edition).
[11] Id.
[12] European Commission Climate Action website, http://ec.europa.eu/clima/policies/ets/index_en.htm (November 2010).
[13] Id.
[14] *EU action against climate change. The EU Emissions Trading Scheme*, European Commission (2009 edition).
[15] Id.
[16] Source: Federal Aviation Administration.
[17] With the exception of efforts to address fuel burn reporting, these are aspirational, non-binding measures.

[18] Annex I countries are industrialized countries and economies in transition; Annex II countries are developed countries which pay for costs of developing countries; and Non Annex I countries are developing countries.

Other EU ETS Issues

The USG and U.S. aviation industry have pointed to a number of EU ETS-related issues including:

- *ETS violates international law*: ETS enforcement by EU Member States on U.S. operators without U.S. consent raises serious legal concerns under international law, including the Chicago Convention and the U.S.-EU Air Transport Agreement.

- *ETS lacks transparency and clarity*: For example, under the EU ETS, if another country can show "equivalent measures" on CO_2 reduction from its airlines, then those airlines would not have to pay the carbon charge for one leg of their European roundtrip. However, the EU has no objective way to measure "equivalence" and has provided no guidance to date.

- *ETS is nothing more than a revenue-raiser for EU Member States*: There is no guidance on how the funds should be used and some Member States intend to use the funds for whatever they want as opposed to investing in research and development efforts with the goal to reduce CO_2 production by the civil aviation sector.

- *ETS actually harms efforts to reduce civil aviation CO_2 production*: The EU ETS limits airlines' ability to have capital to invest in efforts to develop alternative fuels, new fuel-efficient aircraft, or equipment needed to operate in a more efficient and environmentally-friendly satellite-based air traffic control system.

- *ETS could result in a trade war*: The U.S., China, Australia, Canada, and numerous other countries have expressed objections to the application of ETS to their air carriers. China has threatened to cancel airplanes orders from Airbus, and others in the aviation industry have warned that a trade war scenario is real. Both Airbus and the Association of European Airlines (AEA) expressed their concerns that ETS might result in a political situation that would negatively impact European carriers and manufacturers.[19]

- *ETS could negatively impact U.S. competitiveness*: Requiring U.S. operators to meet regional goals and targets of the EU ETS could lead to a less than optimal allocation of schedules and aircraft compared to that which might be achieved through allocations based on system-wide (domestic and international) approach. Additionally, if another country, such as China, is granted a waiver and the U.S. is not, the U.S. air carriers will also be put at a competitive disadvantage. In the end, either scenario could result in job losses in the U.S. aviation industry.

- *The proliferation of "eco-charges" by EU Member States*: There are growing concerns about whether "eco-charges" or "eco-taxes" are consistent with EU Member States' obligations under international law, and whether some of these charges may, in effect, double charge for the same emissions the EU intends to regulate under the ETS.

[19] Concerns were shared with EU climate change commissioner Connie Hedegaard in a joint letter sent in June 2011.

Witnesses:

Panel I:

The Honorable Susan Kurland
Assistant Secretary for Aviation and International Affairs
U.S. Department of Transportation

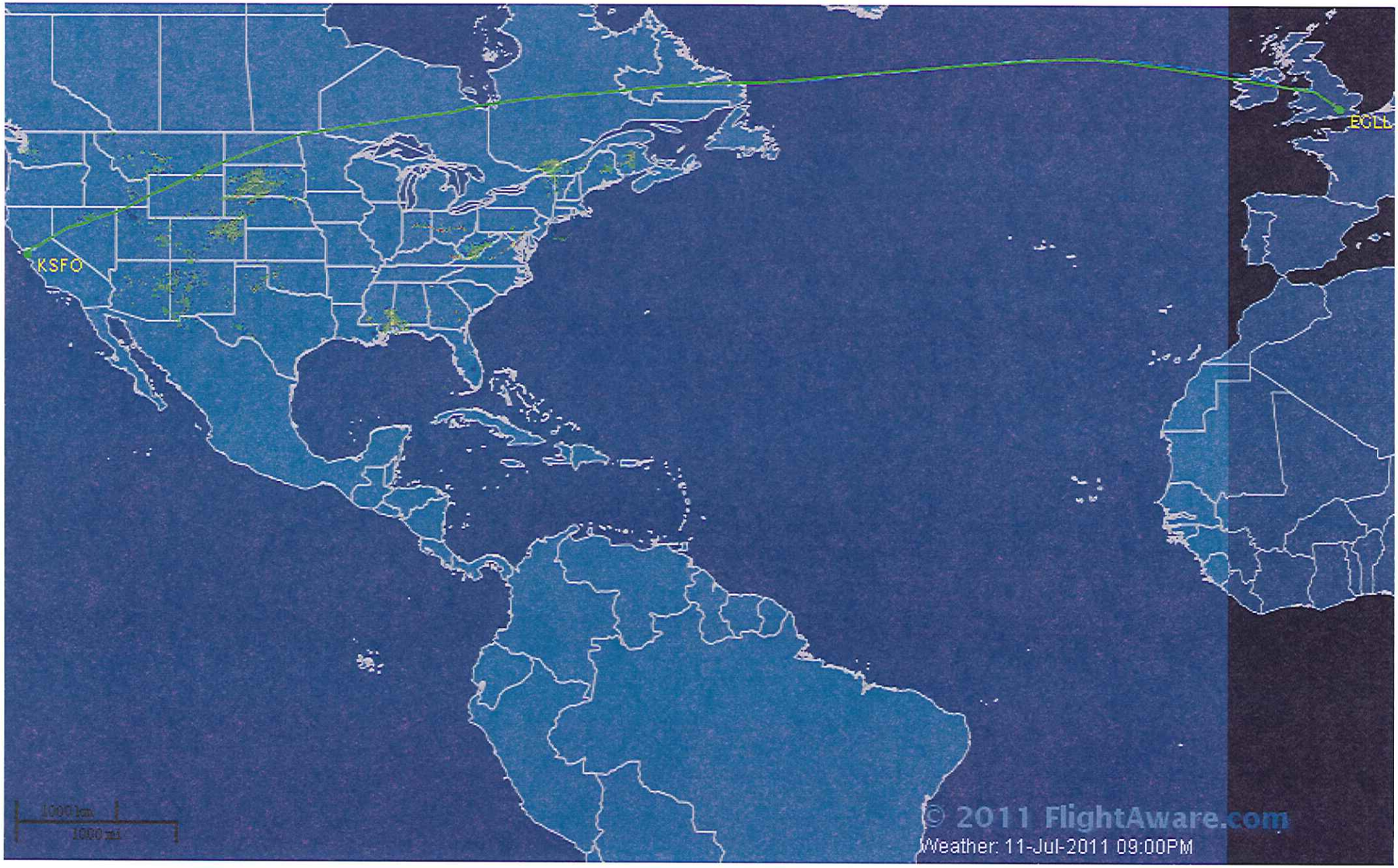
Accompanied by:
The Honorable Julie Oettinger
Assistant Administrator for Policy, International Affairs and Environment
U.S. Federal Aviation Administration

The Honorable Krishna R. Urs
Deputy Assistant Secretary for Transportation Affairs
U.S. Department of State

Panel II:

The Honorable Nancy Young
Vice President, Environmental Affairs
Air Transport Association

Captain Lee Moak
President
Air Line Pilots Association International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