Don't Let Boeing Close The Door On Competition



From The Chairman Of Airbus Americas

May 26, 2010

The competition between Boeing and Airbus in the aircraft business is brisk and healthy. That's good for the aerospace industry and for its customers – and it will be good for the U.S. Air Force, as it makes its selection for the \$35 billion tanker contract (scheduled to be announced in November of this year). The Air Force will be choosing between tankers offered by the Boeing company and by Airbus parent EADS. Fair competition between Boeing and EADS will enable the Air Force to choose the tanker that best suits its military needs and best provides value to America's taxpayers. If the EADS bid is successful, the tanker will utilize the airframe from our Airbus A330 aircraft and will be built in the United States.

Unfortunately, in recent weeks, Boeing and its supporters have stepped up a campaign seeking to eliminate this healthy competition – by requiring that the Air Force show favoritism to Boeing in the tanker bid (and violate U.S. international trade obligations). The campaign revolves around an initial finding by the World Trade Organization (WTO) – which will soon be released publicly – that Airbus has received government support from the European Union member states. Boeing is demanding that EADS be penalized in the tanker competition for any support that Airbus has received; but it ignores the full meaning of the WTO's initial findings and the parallel WTO case against Boeing.

This report, commissioned by Airbus Americas and prepared by the Hogan Lovells law firm, restores balance (and hard facts) to this debate. The report shows that Boeing has also received government support – certainly no less than Airbus. These have come in the form of \$16 billion in R&D subsidies, almost \$6 billion in local and state government subsidies, more than \$2 billion in export-related tax subsidies, and even \$2 billion in foreign subsidies in exchange for moving operations and jobs overseas. Most of these subsidies are under review in a separate WTO case; the findings of that case should be released this year. This report also explains why Boeing's allegations of the subsidies to Airbus are misleading and why the WTO case on government support for Airbus in no way permits the retaliation for which Boeing has been lobbying. This report's facts are well documented and beyond question.

We're not asking for any special favors. We're asking only for fair competition. Customers should be allowed to choose the best airplane at the best value. That should be no less true for the Air Force: the men and women who place their lives in harm's way for us every day deserve the best equipment available.

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T. Allan McArtor Chairman, Airbus Americas, Inc. Herndon, Virginia

Executive Summary

- Boeing and its supporters want to prejudice the Air Force's selection of a new tanker aircraft – and steer the contract to Boeing. Boeing's demands are unfounded, not least because Boeing has itself received a vast amount of government subsidies. While Boeing purports to rely on the findings of the WTO, in fact it proposes actions by the U.S. Government that would violate core WTO rules and risk instigating a major trade war with our allies.
- Boeing's attempts to prejudice competition against Airbus and EADS fly in the face of three principal truths:
 - First, Boeing itself is massively subsidized. The WTO already has ruled that export subsidies received by Boeing are illegal. And in the coming months the WTO is going to rule on a comprehensive legal challenge to a wide array of Boeing subsidies.

Over the last two decades, Boeing has received over \$16 billion in federal government R&D subsidies and almost \$6 billion in state and local subsidies. This does not include over \$2 billion in federal export subsidies that the WTO already has ruled to be illegal. Boeing sought and took these prohibited export subsidies for six years after the WTO held them to be illegal. Boeing also receives subsidies from foreign governments. In fact, Boeing has moved manufacturing of major components overseas to chase foreign government subsidies for its latest aircraft. To date, Boeing has reportedly secured \$1.5 billion from Japan and more than \$500 million from Italy to put manufacturing jobs in those countries.

- Second, Boeing grossly exaggerates the support received by Airbus. Most of the support for Airbus has been loans, which must be repaid. Since 1992, Airbus has paid back about \$1.40 for every \$1 that it has received in government loans, and those loans (along with certain subsidies to Boeing) were explicitly allowed under a 1992 Agreement between the United States and the European Union.
- Third, Boeing misrepresents the significance of the ongoing WTO proceedings. The recent decision on Airbus subsidies is subject to appeal; and the WTO is about to rule on the companion case challenging Boeing subsidies. Hasty U.S. action now would violate the very WTO process which Boeing elsewhere extols. Indeed, it could trigger a trade dispute that would expose thousands of U.S. exporters to retaliation.

Boeing Has Obtained More Than \$16 Billion In R&D Subsidies From The Federal Government

Boeing has relied for decades on federal government research and development (R&D) funding. Boeing's supporters prefer to ignore this sort of subsidy and focus exclusively on so-called "launch aid" provided by EU governments. A recent advocacy document, for example, characterized other types of subsidies to Boeing as "relatively modest" and insisted that "Boeing gets nothing like the multi-billion-dollar infusions of launch aid that Airbus regularly receives." ¹ In fact, government subsidies, such as R&D, are not in the least modest. Whereas Airbus was alleged at the WTO to have received approximately \$3.7 billion in R&D funding since its founding four decades ago, the EU documented that, from the late 1980s to 2006, Boeing has obtained approximately \$16.6 billion in government R&D subsidies. ² That's approximately \$13 billion more funding for Boeing.

R&D funding, which has been carried out principally by NASA and the Department of Defense, subsidizes Boeing by shifting the risk for product development to Government agencies and greatly reducing the need for Boeing to carry out its own research and development. The former Congressional Office of Technology Assessment noted in an earlier review of government support for aircraft manufacturers that, "[t]he availability of technologies developed and tested at NASA's expense and risk helps aircraft manufacturers incorporate new capabilities into their products at diminished cost or risk..." ³ Boeing's current competitive position is built on this funding.

Boeing and its supporters sometimes claim that R&D funding to Boeing is not a subsidy, since Boeing is required to deliver R&D services in exchange for the funding. ⁴ (In fact, the U.S. Trade Representative argues in its WTO complaint that R&D funding to Airbus is an illegal subsidy. ⁵) In any case, such claims miss the essential point: since the U.S. Government is not in the business of manufacturing large civilian aircraft, the U.S. Government does not directly receive anything of value in return for the R&D funding on large civilian aircraft that it has provided to Boeing. A 1997 Congressional Budget Office report concluded that "[t]he benefits from the R&D supported by the NASA programs in question fall almost exclusively to aircraft manufacturers, their suppliers, and airlines." ⁶ A significant portion of R&D funds from NASA and the Department of Defense are designed to support Boeing's commercial businesses and aircraft development.

Boeing "flew the first 777 to [NASA] Langley for a 'thank you' visit on May 10, 1996... [a]s a gesture of thanks for NASA's technology contributions to its creation." NASA and the Department of Defense have funded numerous research programs intended to promote the competitiveness of civilian aircraft manufacturers. For example, NASA's High Speed Research (HSR) program funded research and development related to high speed civil aircraft technology, which, unsurprisingly, has significant applications for large civilian aircraft. In fact, NASA has openly acknowledged that it designed the HSR program with the specific aim of "providing a public sector catalyst in addressing this important opportunity with U.S. industry..." ⁷ Boeing obtained \$1.3 billion of government benefits through this program. Another example is the DOD's research, development, test and evaluation (RDT&E) program, which has provided Boeing almost \$2.4 billion in support. The RDT&E program has included numerous "program elements" on dual-use technologies applicable to both military and commercial aircraft. An independent study noted that "DoD research has yielded indirect, but very important, innovative spillovers to the U.S. commercial aircraft sector, most notably in the areas of airframe development, propulsion, avionics, and flight control systems." ⁸ Boeing has used the technology developed with this program support in its large civilian aircraft, including the 787.

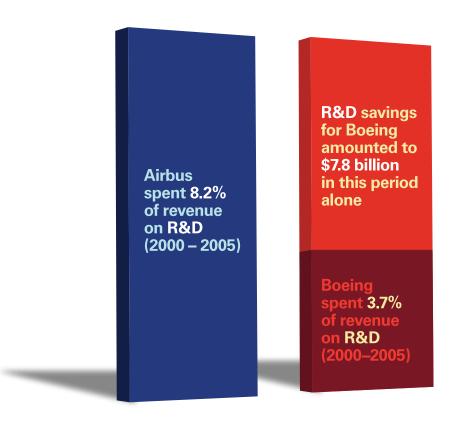
Boeing



Boeing has obtained a vast amount of R&D subsidies — far more than has even been alleged against Airbus.

Examples of commercial benefits to Boeing abound. NASA's Research and Technology Base Program assisted in the supercritical wing on the Boeing 757 and the Boeing 767 (the plane Boeing will use for its tanker), as well as winglets for the Boeing 747-400. NASA's Quiet Aircraft Technology program supported the Boeing 777 landing gear, quiet engine and exhaust technologies. Boeing played a major role in NASA's Ultra Efficient Engine Technology program, the purpose of which was to enable "U.S. manufacturers to design future generations of commercial gas turbine engines that will be leaders in the marketplace." ⁹ Indeed, as NASA itself summarized in one Congressional oversight hearing, "[t]he Aeronautics program will pioneer the identification, development, verification, transfer, application and commercialization of high-payoff aeronautics technologies." ¹⁰

All told, federal government R&D spending has contributed at least \$16.6 billion to Boeing, sparing it some of the significant costs of new research and development on civilian aircraft. The savings to Boeing are apparent from a comparison of the R&D spending of Boeing and Airbus; the government R&D subsidies to Boeing have allowed it to spend significantly less than Airbus on R&D.



NASA & DOD subsidies allowed Boeing to spend much less on R&D.

Boeing Has Obtained Almost \$6 Billion In Local And State Government Subsidies

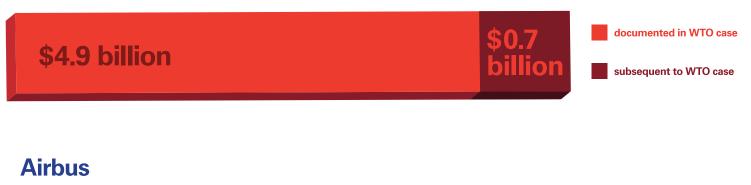
Boeing has also relied on very generous subsidies from local and state governments. It is true that both Boeing and Airbus have received local grants or tax breaks for company facilities. But Boeing gets far more. Airbus was alleged to receive approximately \$1.6 billion in this type of aid. In contrast, the EU documented in the companion WTO case that Boeing received approximately \$4.9 billion in local and state grants and tax breaks; ¹¹ if the South Carolina incentives that post-date the WTO dispute are included, Boeing has obtained at least \$5.6 billion in grants and tax breaks.

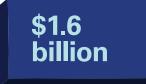
Boeing has collected local and state subsidies across the breadth of the country. Washington state and

"We will give Airbus executives many sleepless nights for years to come."

Governor of Washington State on presenting \$3+ billion in incentives to Boeing

Boeing





Boeing has received a substantial amount of grants and tax breaks for local facilities — far more than has even been alleged against Airbus.

municipal governments have committed to provide Boeing with almost \$4 billion in tax and other benefits. One law in particular, House Bill 2294, provided tax reductions, credits, and exemptions to Boeing worth almost \$3.5 billion over twenty years. The stated goal of these incentives – in the words of the Governor of Washington State at the time – was to help "Boeing... beat Airbus." ¹²

Kansas state and municipal governments provide approximately \$900 million in benefits to Boeing. These benefits include property and sales tax breaks to facilities manufacturing Boeing components and state-sponsored "Boeing bonds." Illinois, meanwhile, created a "Boeing package" to underwrite Boeing's relocation of its corporate headquarters to Chicago.

The European Union's complaint to the WTO documented \$4.9 billion in local grants and tax breaks. But this largesse has hardly ceased since 2006. In the last year, South Carolina announced an incentive package for Boeing that is worth at least \$700 million and is likely worth more than \$1 billion. This package includes, among other things, \$270 million in up-front funding from the state and approximately \$350 million in property-tax breaks. ¹³

	Washington	Illinois	Kansas	South Carolina
Income tax credits	\$\$	\$\$		\$\$
Sales tax exemptions or refunds	\$\$		\$\$	\$\$
Property tax abatements	\$\$	\$\$	\$\$	\$\$
Infrastructure grants	\$\$	\$\$		\$\$
Free or discounted land and buldings		\$\$		\$\$
Utility discounts				\$\$
Low-cost capital financing		\$\$	\$\$	\$\$

Representative subsidies to Boeing from state & local governments.

Boeing Has Collected More Than \$2 Billion In WTO-Illegal Tax Subsidies

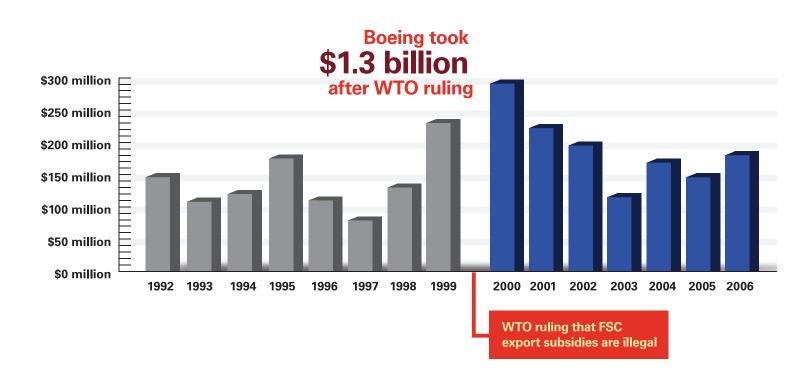
Boeing has earned well over \$2 billion in preferential tax subsidies for Boeing's export-related earnings. These subsidies were provided through a succession of laws, including the Domestic International Sales Corporation (DISC) export subsidy, the subsequent Foreign Sales Corporation (FSC) measures in the Internal Revenue Code, the FSC Repeal and Extraterritorial Income Exclusion Act of 2000, the American Jobs Creation Act of 2004, and then the Tax Increase Prevention and Reconciliation Act of 2005. All accomplished the same explicit goal of boosting the exports of U.S. manufacturers such as Boeing. (In fact, Boeing has historically been one of the largest recipient of these export subsidies.) In the ongoing WTO review, the U.S. Government has not even denied that Boeing received illegal export subsidies – but simply that, as of the end of 2006, it ceased to receive them. ¹⁴

Boeing's tax-related export subsidies are notable for another reason – they had *already* been found illegal after years of litigation under the General Agreement on Tariffs and Trade (GATT) and the WTO. The DISC export subsidy regime was first found to violate the relevant international trade rules in the early 1980s. Despite this finding, Boeing continued seeking and taking export benefits under the program.

When the DISC was renamed and replaced by the FSC export subsidy regime, it too was challenged – this time at the newly created WTO. The European Union brought its WTO case against the program in mid-1998, alleging that Boeing and others were taking export subsidies that were flatly banned under the relevant trade rules. The WTO agreed, first in a panel decision equivalent to a lower court ruling and then later at the appellate level in a detailed WTO Appellate Body decision. These decisions were formally adopted by the WTO (an important part of the substantive and procedural safeguards negotiated by the United States) in March 2000.

Boeing took over \$1 billion in prohibited export subsidy benefits after the WTO found these subsides to violate the WTO trade rules – and they've never returned these benefits. Boeing's response? In 2000 it claimed another \$291 million in prohibited FSC export subsidy benefits; in 2001, it claimed another \$222 million in export subsidies. ¹⁵ Indeed, Boeing continued to aggressively seek and take these prohibited export subsidy benefits for six years after the WTO's appellate ruling – despite the reality that they had already been found to violate the rules. Boeing also continued its litigation against the U.S. Government for another \$400 million in FSC benefits to which it claimed it was entitled from earlier years.

At the end of the process, did Boeing ultimately return or pay back the prohibited subsidies it had taken? Not at all – it kept all the subsidies it received under the FSC regime. This is hardly surprising: the U.S. has argued in dozens of cases that prior benefits received by U.S. companies don't have to be paid back under the WTO system.



Boeing continued to collect export subsidies after they were declared illegal by the WTO.

Boeing Has Sacrificed American Jobs For Foreign Government Subsidies

Boeing has not been content with the very generous support of the U.S. Government, states and municipalities. In recent years, it has sought subsidies from foreign governments and it has pushed its manufacturing overseas in order to obtain such subsidies.

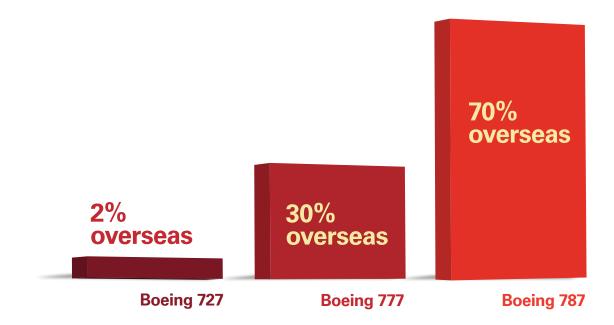
For the 787 aircraft, Boeing reportedly secured a subsidy of almost \$600 million from the Italian Government towards the manufacture of the rear fuselage of the aircraft by the Italian firm, Alenia.¹⁶ Boeing also reportedly obtained approximately \$1.5 billion in launch aid from the Japanese Government for the same aircraft; some estimate that 30 percent of this aid is non-repayable grants, and the remaining 70 percent repayable loans. ¹⁷ In order to secure this Japanese subsidy, Boeing outsourced the manufacture of the wings and fuselage wing box of the aircraft – the very heart of the plane – to the Japanese companies Fuji, Kawasaki and Mitsubishi.¹⁸ Boeing outsourced the sort of technology that had benefited from years of American taxpayerfunded R&D spending.¹⁹ The Economist noted that Boeing's decision "to outsource it to the Japanese is highly significant." ²⁰ As a consequence of Boeing's pursuit of foreign government subsidies, well more than half – experts estimate approximately 70 percent - of the Boeing 787 aircraft will be manufactured overseas. ²¹ This is an all-time high.

"It's a little hard to complain about foreign content on the future tanker when Boeing's Dreamliner was designed for manufacture by a global supply chain... [The 787] will probably end up having more foreign content than the Airbus tanker."

Loren Thompson, Lexington Institute

Indeed, a defense industry analyst recently hired to publish a Boeing advocacy piece, Loren Thompson, pointed out two years ago the hollowness of Boeing's emphasis on American jobs.²² Boeing outsourced the very heart of the Boeing 787 in exchange for a reported \$1.5 billion in subsidies from Japan. Japanese workers at Fuji, Kawasaki and Mitsubishi have these jobs – not Americans.

In fact, the EADS KC-45 tanker will have significantly less foreign content than Boeing's 787 aircraft. The KC-45 aircraft will be built in Mobile, Alabama. The Alabama facility will also produce a commercial freighter based on the same platform, with a combined U.S. production of as many as 40 aircraft annually. In combination, these projects are expected to support almost 50,000 jobs in the United States.



Boeing has pushed production overseas to seek foreign subsidies.

The EU Has Provided Only Modest Support To Airbus Through "Repayable Launch Investment"

Boeing has accused Airbus of receiving \$15 billion in what it calls "launch aid" from European governments over the last 40 years. While, like Boeing, Airbus has received some government support, the amount is substantially less than Boeing alleges – and less than Boeing has itself received.

The launch investments received by Airbus were all *repayable loans*.

In contrast, most of the Boeing subsidies, such as tax exemptions or R&D grants, do not require any repayment. Boeing got the money and kept it, as well as the research benefits, technologies and buildings the money paid for. Airbus did not receive \$15 billion in grants – it was loaned funds for specific programs according to the terms of a detailed agreement between the EU and United States. These amounts are required to be repaid – even before a program breaks even. The value of these benefits, if any, is simply the difference between a government-provided interest rate and the commercially available interest rate; indeed, the U.S. Government has endorsed this methodology. ²³

The reality is that since 1992, Airbus has in fact paid back \$1.40 for every \$1 it borrowed in repayable loans.

Airbus continues these payments, currently repaying loans to EU governments at more than \$500 million per year.

The U.S. Government has provided similar loans in the automobile, banking and green technology sector.

The EU's loans to Airbus are not unique. The U.S. Government has provided loans to automobile manufacturers and financial institutions to promote economic stability; and it has provided loans or loan guarantees to support the development of green technology.

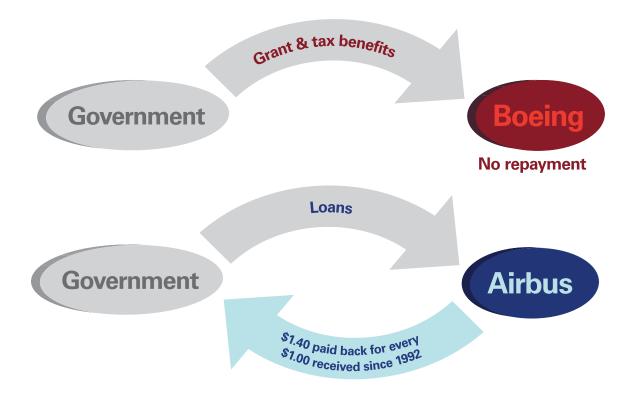
The United States signed an agreement in 1992 allowing the EU to provide repayable launch investment to Airbus.

The United States and the European Union entered into the Agreement on Trade in Large Civil Aircraft in 1992. The purpose of this Agreement was regulate government assistance to large civil aircraft manufacturers in both regions, recognizing that there was government funding on both sides. The Agreement specifically allowed EU member states to loan to Airbus up to 33 percent of a given program's total development costs (what Boeing calls "launch aid"); at the same time, it also allowed for certain R&D and other subsidies to Boeing from the U.S. Government. ²⁴ The EU's repayable launch investment in large civil aircraft were consistent with this U.S.-sponsored Agreement. This Agreement was a binding legal instrument until 2004, when the U.S. Government unilaterally withdrew, under pressure from Boeing.

In 1992, the United States agreed formally that it would not dispute the EU's use of repayable launch investment to Airbus – the very aid that Boeing now claims should exclude Airbus technologies from the tanker bid.

Boeing sometimes pretends that \$15 billion is actually (mysteriously) \$200 billion.

It is not enough for Boeing to accuse Airbus of receiving \$15 billion of aid (aid, of course, which is repayable loans and to which the United States agreed in 1992). For greater rhetorical effect, Boeing and its supporters sometimes pretend that \$15 billion is really worth \$200 billion. Boeing calculates this figure through unfounded assumptions, dubious reasoning and arithmetic sleight of hand. (For example, government support is compounded over decades, so that support in the early 1970s for the A300 aircraft – a model no longer even sold – is calculated to confer the greatest present magnitude.) ²⁵ If Boeing's method of calculation were applied to the Boeing subsidies documented in the companion WTO complaint, then Boeing has received not just \$23 billion, but \$300 billion. That would be \$100 billion more subsidies for Boeing than Airbus, according to Boeing's own calculations. This wild inflation strains credibility.



Unlike Boeing, Airbus has made repayments.

Favoritism To Boeing Would Short-Circuit The WTO Process

Boeing has sought, through Congress, to compel favoritism toward Boeing in the Air Force tanker bidding process. Boeing contends that acting against the EADS tanker bid is justified because a WTO panel has found that Airbus received government subsidies. Boeing relies on the WTO's subsidy finding to demand a form of retaliation at odds with the WTO rules and process.

The WTO dispute (DS316) covering past government support for Airbus is only at the first stage. While Boeing has sought to create a false impression of finality, the determination by a WTO panel regarding past government support to Airbus is similar to a lower court decision in the United States. The decision at this stage of the proceeding is not meant to quantify any subsidies; in any case, it is subject to a well-defined appeal and review process at the WTO.²⁶ This process is expected to continue at least into 2011, and a wide range of ultimate outcomes is possible. If the appeal upholds any of the panel's findings, the WTO's rules provide that Europe should then be given a reasonable period of time to comply with the panel's findings. As a result of rules negotiated by the U.S., the WTO strictly prohibits any retaliation during the appeal process; members commit themselves to following this process.

Unilateral action now – before appeals, before the reasonable period of time, before consultations – would short-circuit the entire WTO process and be a major violation. The United States has never taken such an action.

The companion WTO decision covering many Boeing subsidies (DS353) is no less relevant.

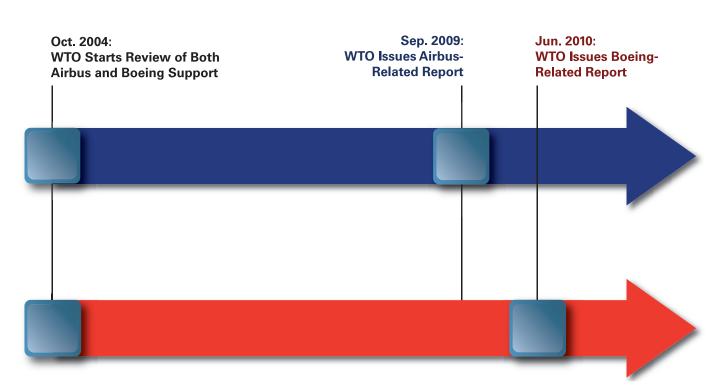
Boeing stands accused at the WTO of having received over \$20 billion in WTO-illegal subsidies. ²⁷ An initial WTO decision in this case is expected as soon as June, 2010; the final decision is likely to be released at the end of the year. The WTO's decision on Boeing subsidies is an important part of any fair debate on the role and impact of government support for civil aircraft. Boeing's attempt to bias the tanker process before a decision on its own subsidization is an attempt to shut the door on competition, rather than address the WTO's findings on subsidies received by aircraft manufacturers.

Boeing urges the United States to violate the same WTO rules that it purports to champion. The United States took a lead role in negotiating the rules for compliance with WTO decisions; yet the actions Boeing is now urging the U.S. to take, based only

"[T]he WTO case gives us no basis on which to make a judgment" in the tanker bid.

Robert Gates, Secretary of Defense

on a WTO decision that has not run the course of appeals, plainly violate those rules. Over the last two years, the United States has taken extraordinary steps to support key U.S. industries – such as the automotive and financial industries – that have global operations. The U.S. Government has a strong interest in exercising caution about breaking with the WTO on a high-profile matter, when it may face significant exposure in potential subsidy claims and relies on these same WTO rules and procedural safeguards to protect the industries it has supported. (Boeing is well aware of the compliance process, given the earlier WTO finding that Boeing received several billion dollars in illegal tax-related export subsidies. At that time, Boeing exploited every procedural safeguard and, as a result, took over a billion dollars in WTO-illegal subsidies for six years after the initial WTO decision.)



A decision is due this year in the parallel WTO case addressing subsidies to Boeing.

End Notes

- 1. Loren Thompson, European Aircraft Subsidies: A Study of Unfair Trade Practices (March, 2010), pg. 7.
- 2. First Written Submission of the United States in European Communities and Certain Member States Measures Affecting Trade in Large Civil Aircraft, WT/DS316 ("EC Aircraft"), *available at* http://www.ustr.gov/webfm_send/816; First Written Submission of the European Communities in United States Measures Affecting Trade in Large Civil Aircraft, WT/DS353, *available at* http:// trade.ec.europa.eu/doclib/docs/2007/september/tradoc_136101.pdf ("U.S.– Aircraft").
- 3. Office of Technology Assessment of the Congress of the United States, Competing Economies: America, Europe, and the Pacific Rim, Chapter 8 (selections): Government Support of the Large Commercial Aircraft Industries of Japan, Europe, and the United States, at 347 (1991).
- 4. Boeing claims, for example, that "Most of the alleged 'subsidies' to Boeing are legitimate U.S. payments for services rendered," available at http://www.boeing.com/aboutus/govt_ops/docs/wto/bckgrd_wto_cases_070809_r2.pdf.
- 5. First Written Submission of the United States in EC Aircraft, available at http://www.ustr.gov/webfm_send/816.
- 6. Reducing the Deficit: Spending and Revenue Options, Congressional Budget Office, March 1997, at 153, available at http://ftp.cbo.gov/ftpdocs/0xx/doc6/doc06.pdf.
- 7. NASA HSR Budget Estimates, at FY 1999, SAT 4.1-29.
- 8. Knowledge Diffusion in the U.S. Aerospace Industry (Thomas E. Pinelli, et al., eds., 1997), pg. 46.
- 9. NASA, Ultra Efficient Technology Program 2001 Performance Report.
- 10. NASA Fiscal Year 2000 Estimates, Hearing on FY 2000 NASA Appropriations, Before the Subcomm. on Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies of the House Comm. on Appropriations, 106th Cong., 1st Sess., at AS-4 (1999).
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- 12. Governor Locke News Release, 20 June 2003.
- 13. David Slade & Katy Stech, "Boeing's Whopping Incentives," *Post and Courier* (Jan. 17, 2010); Seattle Time Business Staff, "Boeing's Charleston Tax Breaks Top \$800M; 60 years and counting for airplane tax break." *Seattle Times* (Jan. 24, 2010).
- First Written Submission of the United States in EC Aircraft, available at http://www.ustr.gov/webfm_send/816, para. 422 and note 576. See also Second Written Submission of the European Communities in EC – Aircraft, available at http://trade.ec.europa. eu/doclib/docs/2007/july/tradoc_135383.pdf, paras. 632-7.
- 15. 10K Filings of the Boeing Company.
- 16. David Pritchard & Alan McPherson, "Industrial Subsidies and the Politics of World Trade: The Case of the Boeing 7e7," *The Industrial Geographer* Vol. 1, Issue 2, pg. 69. "Airbus and Boeing: America Flies to War," The Economist (Oct. 7, 2004).
- David Pritchard & Alan McPherson, Boeing's Diffusion of Commercial Aircraft Design and Manufacturing Technology to Japan: Surrendering the U.S. Aircraft Industry for Foreign Financial Support, Canada-United States Trade Center Occasional Paper No. 30 (March, 2005), pg. 9.
- 18. Dominic Gates, "Boeing 787: Parts From Around the World Will Be Swiftly Integrated," Seattle Times (Sep. 11, 2005).
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- 21. "How Japan Learned to Fly Going Japanese," The Economist (June 25, 2005); David Pritchard & Alan McPherson, Boeing's Diffusion of Commercial Aircraft Design and Manufacturing Technology to Japan: Surrendering the U.S. Aircraft Industry for Foreign Financial Support, Canada-United States Trade Center Occasional Paper No. 30 (March, 2005), pg. 3.
- 22. Judith Crown & Keith Epstein, "Boeing's Audacious Allies" Business Week (March 10, 2008).
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- 24. U.S. E.U. Agreement on Large Civil Aircraft, Arts. 4-5.
- 25. Second Written Submission of the European Communities in EC Aircraft, *available at* http://trade.ec.europa.eu/doclib/ docs/2007/july/tradoc_135383.pdf, paras. 953-962. *See also* Second Written Submission of the United States in EC – Aircraft, available at http://www.ustr.gov/webfm_send/817, paras. 610-613.
- 26. See generally Dispute Settlement Understanding of the World Trade Organization.
- 27. See First Written Submission of the European Communities in U.S.– Aircraft, available at http://trade.ec.europa.eu/doclib/ docs/2007/september/tradoc_136101.pdf.

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Pg. 3. Joseph R. Chambers, Concept to Reality: Contributions of the NASA Langley Research Center to U.S. Civil Aircraft of the 1990s (2003), at 166-167.

Pg. 6. Governor Gary Locke's Remarks, 7E7 Final Agreement Signing, 19 December 2003, *available at* http://www.digitalarchives. wa.gov/governorlocke/speeches/speech-view.asp?SpeechSeq=514.

Pg. 10. Judith Crown & Keith Epstein, "Boeing's Audacious Allies" Business Week (March 10, 2008).

Pg. 14. Gopal Ratnam & Tony Capaccio, "Boeing Backers Seek to Raise Price of EADS Tanker Bid," Bloomberg (May 13, 2010).

Chart Data

Pg. 4. Boeing subsidies alleged in First Written Submission of the European Communities in U.S.– Aircraft, *available at* http://trade. ec.europa.eu/doclib/docs/2007/september/tradoc_136101.pdf. Airbus subsidies alleged in First Written Submission of the United States in EC – Aircraft, *available at* http://www.ustr.gov/webfm_send/816.

Pg. 5. 10K Filings for the Boeing Company; 10K Filings for EADS. Data refers to companies' commercial aircraft divisions.

Pg. 6. Boeing subsidies alleged in First Written Submission of the European Communities in U.S.– Aircraft, *available at* http://trade. ec.europa.eu/doclib/docs/2007/september/tradoc_136101.pdf.; David Slade & Katy Stech, "Boeing's Whopping Incentives," Post and Courier (Jan. 17, 2010). Airbus subsidies alleged in First Written Submission of the United States in EC – Aircraft, *available at* http://www.ustr.gov/webfm_send/816.

Pg. 7. Jack Norman, Boeing's Cash Cow: A Corporate Strategy's Impact on Middle-Class America, Institute for Wisconsin's Future (Apr. 2010).

Pg. 9. 10K Filings for the Boeing Company.

Pg. 11. David Pritchard & Alan McPherson, Boeing's Diffusion of Commercial Aircraft Design and Manufacturing Technology to Japan: Surrendering the U.S. Aircraft Industry for Foreign Financial Support, Canada-United States Trade Center Occasional Paper No. 30 (March, 2005).