A Coach's Notes[1]

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Resolved: Aviation fuel for all domestic and international flights should be taxed for the purpose of combating global climate change.

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Introduction

This is the second edition of the 2007-08 CDA season. If you would like to receive the previous editions of these Notes, please email me and I will send them to you. Accompanying this document is a transcript of my notes from the final round in two formats, transcript and flow chart, and a copy of the packed from the tournament. I try to email these to CDA coaches within two weeks of the tournament.

These notes are intended for your benefit in coaching your teams and for the students to use directly. I hope that you will find them useful teaching tools. Please feel free to make copies and distribute them to your debaters.

I appreciate any feedback you have, good and bad. The best comments and suggestions will find their way into subsequent issues. I would also consider publishing signed, reasoned comments or replies from coaches or students in subsequent issues. So if you'd like to sound off on some aspect of the debate topic or the CDA, send me an email.

Analyzing and Debating a Policy Resolution

This month's resolution is a pure policy resolution. The affirmative is required to advocate a specific policy action directed at a single industry in order to combat a named problem—not much wiggle room there. In last month's edition of Coach's Notes we looked at value debate, so this month we will look at policy debate.

What Does the Resolution Say?

Let's look closely at the resolution and see what it says. First, "Aviation fuel…should be taxed" is clearly the main policy prescription, and the Affirmative cannot escape it. They cannot propose any other policy changes unless they are a direct consequence of this tax. For example, the Affirmative can argue that higher fuel taxes will be an incentive for the airlines to push for better routing and air traffic control to reduce their flight costs. But the Affirmative cannot call for those changes directly.

Second, "for all domestic and international flights" is both clear and ambiguous. It is clear that the tax, where implemented, must cover flights within a country and those crossing its border. But it isn't clear where the tax should be implemented. One interpretation would be that this must be implemented by all nations, or by an international body. Another is that it need be implemented by only one country or a select group. The Affirmative might recommend the tax only for the US, the US and the European Union, the whole world, or some group in between.

Third, "for the purpose of combating global climate change," is also subject to varying interpretation. The quick read would seem to imply that the funds generated by the aviation fuel tax have to be spent to combat global climate change. But the words don't actually say that. An alternate interpretation is simply that the reason to tax aviation fuel is to affect airline behavior in a manner that combats global warming, and that is all. In this interpretation it wouldn't matter what the revenue was used for, the benefit coming solely from improvements in airline efficiency.

Form of the Resolution

As noted, this resolution is very specific. The Affirmative has little room to maneuver: one problem, one industry, one solution. It is a bit unusual to limit the debate in this way: most policy resolutions do not state a problem area, simply a policy prescription. Consider the following alternatives:

1. *"Resolved: That aviation fuel for all domestic and international flights should be taxed."*
2. *"Resolved: That significant steps should be taken to reduce aircraft emissions."*

In the first case, we keep the specific policy prescription, but the Affirmative has the freedom to determine the justification for the policy. In the second, the Affirmative has the freedom to choose both the problem area and the specifics of the policy to be implemented.

Presumption and Burdens

Policy resolutions should generally be stated as proposals for change in the status quo.[2] The packed tells us there is no consistently applied tax on aviation fuel, so the resolution is consistent with this.

[2] For example, "In debates about propositions of policy, affirmative advocates support change, usually favoring new government policy." Freeley, Austin J., and David L. Steinberg, Argumentation and Debate, 11th Edition, 2005, Wadsworth, page 41.

The Affirmative has the burden of proof and the Negative has the benefit of presumption. "Presumption" means that in the absence of a case in favor, a resolution to change the status quo should not be adopted. The other side of presumption is the "burden of proof" on the Affirmative to present such a case. So the Affirmative must provide a reasonable argument for the Judge to adopt the resolution. The Negative may either show the Affirmative argument does not stand, or present a superior counter-argument against the resolution, or it may do both.

Note that presumption and the burden of proof just set the terms of the debate. Both sides have a burden to support the arguments they present—mere assertion is not argument—and a burden to respond to arguments made by the other team.[3]

"Should," not "Would" or "Will"

The resolution includes the word "should," a critical component of almost all policy resolutions. The complexities of policy implementation would overwhelm any debate of limited duration. The Affirmative does not need to show that any particular government or international body actually will implement an aviation fuel tax.

I heard several Negative teams make arguments along these lines. In one case the Negative said that it was unlikely that the countries of the world would agree on a single, universal tax. In another, the Negative said that there was no guarantee the government would spend the money to prevent global climate change. A third said there was no organization to receive and spend the money.

None of these arguments are valid. The Affirmative does not have to show that any government or other body will or would implement the resolution. Nor do they have to ensure that if implemented the funds will go to combat global climate change or set up an organization to receive and spend those funds. The Affirmative need only show good and sufficient reason that it is desirable to adopt the resolution.

While the Affirmative is free of the burden of the details of implementing the resolution (at least those details it does not introduce itself), the Affirmative does have to provide enough detail to show the resolution is workable. Since fuel taxes already exist in many jurisdictions in some form, it seems reasonable that they can be expanded. The Affirmative is also not free to ignore practical consequences of the resolution. A tax has to be collected by someone, and collecting it will therefore incur costs of collection and enforcement. The Affirmative cannot ignore a Negative disadvantage on these grounds by saying the Affirmative is not responsible for implementation.

Similarly, economic theory tells us a tax will impose an economic burden on whoever is taxed and will affect their behavior. The Affirmative cannot assume a "Goldilocks story" claiming the tax will be just enough to induce the airlines to be more economically efficient but the tax will be low enough not to damage airline profits. The Affirmative has to argue these points, and respond to Negative counter arguments.

Finally, if the Affirmative states that the funds raised will be used to combat global warming, they cannot simply claim this is an obvious advantage of the resolution. They

[3] For a more detailed discussion of the burdens on each side in a debate, see the November 2006 edition of Coach's Notes, available from the author.

need to provide some detail as to how the funds will be used so that any benefit can be judged. Stating the money will be spent on climate research or engine technology would yield no benefit if those pursuits are already fully funded, or if no further progress were possible, or if what needs to be done is implementation and not research. The Negative has a right to question these details.

The Affirmative Policy Case: Harm, Inherency, Solvency

The classic Affirmative policy case has three parts: harm, inherency and solvency. Some texts call these "stock issues." The three work together to form a cohesive argument that justifies changing the status quo.

"Harm" is the problem to be solved. The Affirmative needs to show there is a significant harm in order to justify adopting the resolution. If there is no problem, there is no need for action. What would be the justification for taxing aviation fuel if aircraft engines emitted no greenhouse gases or pollutants, or if these emissions caused no damage? If the problem is not significant, it does not justify significant change. Suppose the resolution read: *Resolved: That fuel used in model airplanes should be taxed for the purpose of combating global climate change*. It seems unlikely that hobbyists are a major threat to the environment.

Because the resolution is specific, the Affirmative has no real choice in presenting a harm: global climate change it is. This is unfortunate, because the packet provides no information on this issue. The Affirmative can assume global warming is bad, and hope the Negative doesn't notice, or it can present an argument based on the Affirmative's own knowledge of the issue.

The statement of the resolution is unfortunate in this respect for the Affirmative. Suppose instead we had been given the first alternative discussed above, *"Resolved: That aviation fuel for all domestic and international flights should be taxed."* The Affirmative could use global warming as its harm. But they could also cite economic distortion due to uneven tax policy, waste of natural resources, inefficiency leading to passenger delays, perhaps others.

"Inherency" links the harm to the status quo. The dictionary definition of "inherent" is "involved in the essential character of something; belonging to by nature." The Affirmative has to show that the problem is part of the status quo. Doing more of the same, or taking half measures, will not solve the problem or ameliorate the harm. Only by making significant changes like adopting the resolution can improvement occur.

Inherency is difficult in this case. The straightforward argument is that greenhouse gases cause global climate change, and aircraft emit greenhouse gases. Only by providing airlines with an incentive to be more fuel efficient will this change. The problem with this argument is that there any number of ways to provide airlines with an incentive to improve fuel efficiency: a tax credit or subsidy (which is almost a perfect economic substitute for a tax), fleet fuel efficiency guidelines with appropriate penalties, or investing in better air traffic control and flight navigation systems. And since fuel is a large (if not the largest) part of an airline's cost structure, they already have an incentive to be as efficient as economics, operations and technology allow.

The need to show inherency means the Affirmative can't simply say, "well, a fuel tax works too." The Affirmative has to be prepared to show these other fuel efficiency incentives don't work, or work much less well. Too many Affirmative cases try to slide by on this point. Why would you implement a major new tax if minor changes to existing policies would solve the problem? The argument "if it worked, or if it were easy, it would have been done already" is also invalid. It's as much an argument against the resolution as against any alternatives.

"Solvency" is a demonstration that by adopting the resolution you will significantly reduce the harm you presented. The catch here for the Affirmative is significance. Simply showing that a tax on aviation fuels will give airlines an incentive to buy more fuel efficient aircraft is not enough. Global climate change may be big problem, but even if you eliminated air travel completely, would it make that much difference?

Solvency is the final link in the chain: first, global climate change caused by greenhouse gas emissions is a major threat (harm); second, only taxing aviation fuel can provide airlines with enough incentive to be more fuel efficient and reduce their emissions (inherency); and third, reduced aircraft emissions of greenhouse gases will significantly reduce the risk of global climate change (solvency).

Showing solvency does not require the Affirmative to present a concrete plan, though the Affirmative may choose to do so. It is enough to connect adopting the resolution to reducing the harm: fuel taxes mean higher fuel costs which are an incentive to buy more fuel efficient aircraft which by definition have lower emissions. A plan is a specific statement about the implementation of the resolution, and may be useful with some cases. For example, the Affirmative plan to implement this resolution might be that the revenues go to improved air traffic control to further reduce emissions by reducing flight times, and reduce the impact of the tax on airline profits.

An Affirmative policy case can have a fourth component, "**Advantages**," though some may group this under solvency. There may be ancillary benefits to adopting the resolution beyond mitigating the harm presented. For example, higher fuel taxes should not only encourage airlines to purchase more fuel efficient craft, but also encourage them to use aircraft more efficiently. Thus higher fuel taxes should encourage airlines to press for better routing and air traffic control. This should make flights shorter—more direct rounds, quicker landing approaches, fewer runway delays—and more predictable, certainly a benefit to air travelers.

Negative Policy Case

The job of the Negative is, well, to be negative. The goal of the Negative in policy debate is to counter one or more of the stock issues: show that there is no harm, or that the harm is not significant; show the problem can be solved by using existing policies and procedures, that is, the problem is not inherent in the status quo; show that adopting the resolution will not solve the problem; or show that adopting the resolution will cause problems that will outweigh any advantage or benefit. While the Negative can win the debate by succeeding on any one of these points, most Negative teams will do all four, providing a layered defense of the status quo. The Negative also has a fifth line of attack, in that they can provide a counterplan.

Most of the Negative arguments are straightforward. In one debate I saw a very nice example of a layered Negative case that went as follows:

1. Global climate change is both unlikely and if it does occur, it may be more beneficial than harmful.
2. Aircraft emissions, at 3%, are not a significant contributor to the greenhouse gases that are said to cause global warming, and in any case adopting the resolution would not eliminate these emissions but only reduce them partially.
3. There are initiatives already in place to reduce greenhouse gas emissions which could be accelerated to provide even greater reductions than what could be achieved by adopting the resolution
4. An additional fuel tax would likely bankrupt the airlines, who are already under financial pressure.

The order is a bit different from the Affirmative, in that these Negative arguments speak against harm, solvency and inherency respectively, and conclude with disadvantages.

Some might interpret the third Negative argument above as a **counterplan**. I would disagree, simply because (3) mentions activities that are already in progress. These might include tighter auto fuel economy standards, further limits on power plant emissions and so forth. I would distinguish a counterplan as a Negative proposal that something new be done, but something that is not contemplated in the Resolution.

For example, the Negative counterplan might be to propose funding for a new air traffic control system that would permit more efficient flight routing. This could be paid for from existing or increased taxes on passengers. The Negative could argue that shorter, more direct flights without landing delays would reduce emissions by as much as adopting the resolution. At the same time, it would improve passenger experience and avoid harming the airlines.

Policy Debate in Summary

One of the most consistent weaknesses I see in CDA debates on policy issues is that neither team understands the requirements of a policy case. The Affirmative presents a few contentions that suggest the Resolution is a good idea; the Negative presents a few contentions that suggest the Resolution is a bad idea. The Affirmative never shows adopting the resolution is central to fixing a significant problem. The Negative team never calls the Affirmative on this failure. Why should the Affirmative or Negative try to do more? Why bother with harm, inherency and solvency?

These stock issues help the Affirmative build a case that can be defended. These building blocks lock together and strengthen each other.

- Harm: there is a significant problem that needs attention.
- Inherency: nothing we are doing now will fix that problem.
- Solvency: adopting the resolution will make the difference.
- Advantages: adopting the resolution will provide additional benefits

Those same stock issues guide and focus the Negative attack:

- Harm: has the Affirmative show there is a problem that justifies all this fuss?
- Inherency: isn't the problem already being solved? .
- Solvency: is the resolution really going to fix the problem?
- Disadvantages: what are the negative consequences of adopting the resolution?

The foundation I've outlined for policy debate can found in most texts on debate. Policy debate has roots going back to the Greek philosophers who invented rhetoric. The stock issues of policy debate survive and are propagated because they work. You can certainly win debates by ignoring them, but you will be at a decided disadvantage against a team that understands and uses these concepts against you.

Airline Economics

In extemporaneous debate it helps to know "stuff." You never know what could be useful. In discussing airlines in this month's resolution there are two concepts from economics that you should have known. The first is the impact of taxes; the second is how capital intensive industries work. While we will talk about airlines, the principles carry to other industries, and perhaps future debate topics.

Economics of Taxes

Economic theory tells us that when you tax something you increase its cost. Who bears the cost depends on demand for the good. If demand is very sensitive to price—the economic term is "inelastic"—the producer can't pass the tax on to consumers of the good by a price increase without a significant fall in demand. The producer has to absorb the tax if he doesn't want demand to decline. If demand isn't price sensitive ("elastic") then the produce can raise the price and demand won't change by much. Costs can be passed on to customers. Most goods are somewhere in between, and the tax will be shared between the producer and the consumer.

In this case we have two products and two levels of demand to worry about: airlines demand for fuel which will be directly affected by the tax; and consumers and shippers demand for air transportation which will be indirectly affected by how much of the tax the airlines have to absorb but can pass on. Airline demand for fuel is very inelastic in the short run. They have invested in a lot of expensive aircraft that produce no revenue if they don't fly. So they will pretty much have to pay for fuel whatever the price. (We will talk about demand over the longer term below.) The airlines will have to absorb the increase in fuel cost caused by the tax unless they can pass it on to customers.

Ticket demand is relatively more elastic given the high degree of competition among airlines and the many transportation alternatives. Airlines were wary about passing on rising fuel prices through increased ticket prices over the past few years until demand rose and flights were full. It is likely the airlines would have to absorb part of the cost which will hurt their profits, and will be able to pass some on to passengers.

If airlines could pass all of the costs of the tax on to passengers they would have no incentive to invest in fuel efficient aircraft. If they can increase their prices in step with

the tax with no impact on ridership, their profits are unchanged. This means that if the Affirmative argues the resolution will result in greater fuel efficiency, they have to accept that in the short run the tax has to reduce airline profits.

Finally, airlines don't particularly care about the tax, they only care about the total fuel cost. Rising oil prices will have as much of an effect as the same price increase caused by a tax. Falling oil prices could easily counteract the impact of any tax: if jet fuel goes up 50 cents a gallon due to a new tax, but falls 50 cents a gallon due to a decline in oil prices, the net effect of the two will be zero. If oil prices are highly volatile, the tax may be unimportant in the airlines decision making process compared to fluctuations in oil prices.

Capital Intensive Industries

The second important economic fact is that airlines are a capital intensive industry: aircraft, landing gates, reservation systems are all expensive and last a long time. Most airlines buy planes with borrowed money, or lease them from other companies under long-term contracts. This means that they have to make loan or lease payments whether the planes fly or not. This is why their demand for fuel is so inelastic in the short run—if they stop flying they have no revenue and can't make their payments. As a result, airlines will often fly even if they are not making a profit, because if they stop flying their losses would be even greater and they would go bankrupt. Their only hope is that if they keep flying, eventually revenues and profits will improve.

The same logic applies to replacing aircraft. If airlines decide to replace the plane before the loan is paid off or the lease term has ended, they still have to continue making payments on the old plane as well as the new one. Even if there are more fuel efficient airplanes available, and fuel is more expensive, an airline may still go bankrupt if it tried to replace all its planes before they were paid off. Your parents may still be driving that big SUV they bought when gas was cheap because they are still making loan payments, and they can't sell the car for enough to pay off the loan! This suggests improving fuel efficiency can take a long time.

In the packet there is a statement that airline fuel efficiency is improving at the rate of 1% per year. Is that good or bad? Let us suppose that the useful life of a new airplane is 20 years. If this is true, it means that airlines have to replace about 5% of their fleet every year on average. If new aircraft are 20% more fuel efficient than the aircraft they replace, then average fuel efficiency will increase by 1% per year.[4] For fuel efficiency to increase faster, you have to change one of those three numbers: the useful life of a plane has to be shorter, the airlines have to replace planes more quickly, or new planes have to be more fuel efficient.

One way to get faster replacement is to make old planes too expensive to fly. This would happen if the increased cost in fuel that had to be absorbed by the airlines exceeded the future loan or lease payments. But that could take a pretty steep increase in the fuel tax!

[4] Each year, after replacing 5% of the fleet, you have 95% of the planes at the old efficiency of 1.0, and 5% at 1.2 times the efficiency. 95% x 1.0 + 5% x 1.2 = 1.01.