Smoking Aboard Aircraft: Safety, Health & Due Process

An Evolution in United States Culture

Policy Process Analysis

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Introduction

After nearly half a century of controversial research, bold business decisions and tragic events leading to piecemeal rulemaking for in-flight[1] smoking, American culture was finally ready to support a comprehensive ban on smoking aboard aircraft in 2000. Public policy requiring drastic cultural shift, such as this tends to have lengthy cycles, with irregular occurrences of the policy process stages. According to public policy scholars Michael Howlett, Michael Ramesh, and Anthony Perl, the five key stages of the policy process are agenda setting, formation, decision-making, implementation, and evaluation.[2] While these stages occur mostly sequentially, with the issue of in-flight smoking, they seemed to fluctuate out of order and overlap throughout the policy process. While the deeply culturally connected nature of the in-flight smoking issue may have contributed to its irrational policy evolution, rationality in the policy process is an uncommon assumption. Political scientists and theorists Kevin Smith and Christopher Larimer point out the process of creating public policy is usually political and logical, and more rationalized than rational.[3] In the case of in-flight smoking, public officials seemed to rationalize policy decisions based on the actions of the private markets most directly linked to the debated policy; the airlines. Throughout the policy evolution, while in-flight smoking was still on the public agenda, airlines imposed smoking restrictions of their own business initiatives. Private regulations seemed to effect public policy formation, as similar public laws followed.

To fathom the significance of the U.S. public policy surrounding tobacco use on airlines, it is important to first understand the corresponding roots in American culture. Cigarettes were first introduced to the U.S. in the 19th century, becoming the most popular form of American tobacco consumption by the Civil War.[4] Cigarettes' ease of inhalation resulted in greater levels of nicotine absorption to the blood stream, and increased addition. Recreational cigarette smoking exploded in popularity concurrent to the birth of aviation in the early 1900's. According to Dr. Howard Markel, professor of pediatrics, psychiatry and the history of medicine at the University of Michigan, "from the early 1900s to the 1960s the cigarette was a cultural icon of sophistication, glamour and sexual allure," with the greatest increase in number of smokers around 1930 when significant health effects were still unknown.[5] Figure 1 shows the annual number of adult smokers in the U.S. continuing to rise in correlation with unknown health risks, which enabled tobacco glamorization to consume American culture. While tobacco use increased in popularity, American interest in flight exploded. Aircraft use in combat during World War I spurred private and commercial aviation potential. Aviation became popularized in American culture through media sensationalized events such as Ralph Pulitzer's inauguration of the annual National Air Races for military aircraft in 1920, and Charles Lindbergh's completion of the first trans-Atlantic flight in 1927.[6]

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[1] In-flight vs. Inflight: these terms appear to be used interchangeably throughout literature. According to Cambridge Dictionary, Merriam-Webster Dictionary, Dictionary.com & TheFreeDictionary.com, *in-flight* refers to something "done, served, or shown during an air voyage." Conversely, Oxford Dictionary identified inflight as "occurring or provided during an aircraft flight." Merriam-Webster Dictionary, Dictionary.com & TheFreeDictionary.com are the only sources to acknowledged the alternate term, while they do not identify it as proper.

[2] Michael Howlett, Michael Ramesh, and Anthony Perl. *Studying Public Policy*.

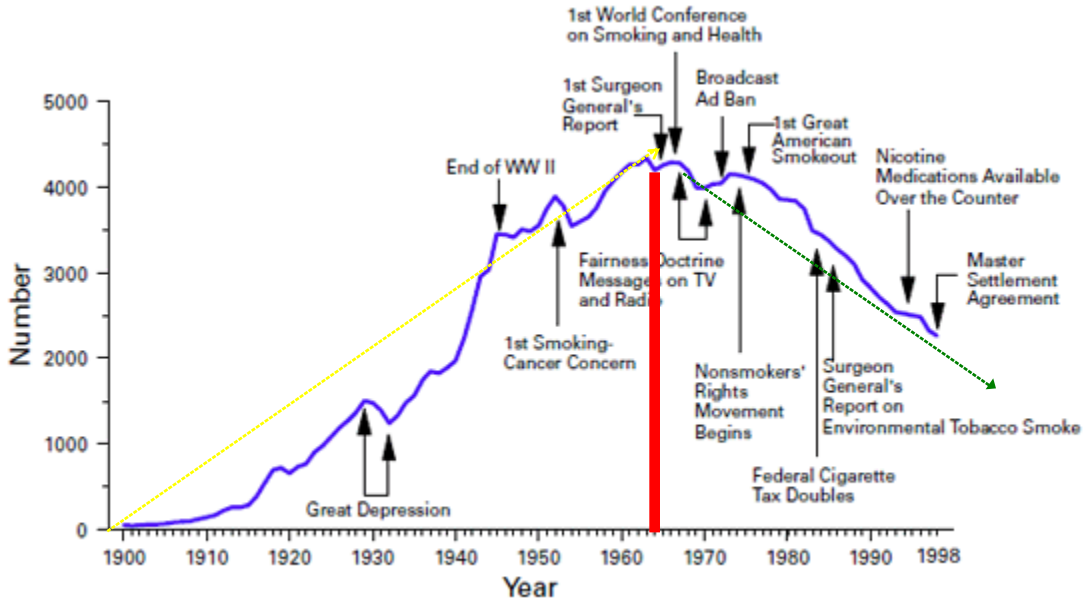
[3] Kevin B. Smith and Christopher Wesley Larimer, *The Public Policy Theory Primer*, Chapter 4.

[4] CDC, "Highlights: Tobacco Timeline."

[5] Howard Markel, "Essay: Tracing the Cigarette's Path from Sexy to Deadly."

[6] McMillan Houston Johnson V., "Taking Off: The Politics and Culture of American Aviation, 1920-1939."

Figure 1: Annual adult cigarette smokers per capita and major influential health events.[7]



Sources: United States Department of Agriculture; 1986 Surgeon General's Report.

Like most industry, tobacco and airline companies both took advantage of popular culture with savvy marketing paring cigarettes with celebrity pilots and commercial airliners. Figure 2 shows celebrity pilots representing the glamor of aviation in tobacco advertisements, while figure 3 shows tobacco products being used to glamorize aviation in airline advertisements. This pairing of two iconic industries, tobacco and aviation, with an image of glamor and sophistication worked to weave in-flight smoking deep into the fabric of American culture, leading to a slow and fragmented process of creating regulations against it.

[7] CDC, "Achievements in Public Health, 1900-1999: Tobacco Use --United States, 1900-1999." The yellow dotted line shows the increasing rate of American smokers during the period of explosive aviation popularity and little knows tobacco health risks. The green dotted line shows the decreasing rate of American smokers, which occurred directly after the l964 U.S. Surgeon General report identifying health risks related to tobacco consumption, represented by the red solid line.

Figure 2: Celebrity pilots featured in tobacco advertisements.

(clockwise from left) Amelia Earhart (1928), Sally Eilers, Jack Holt (1931) and Roscoe Turner.[8]

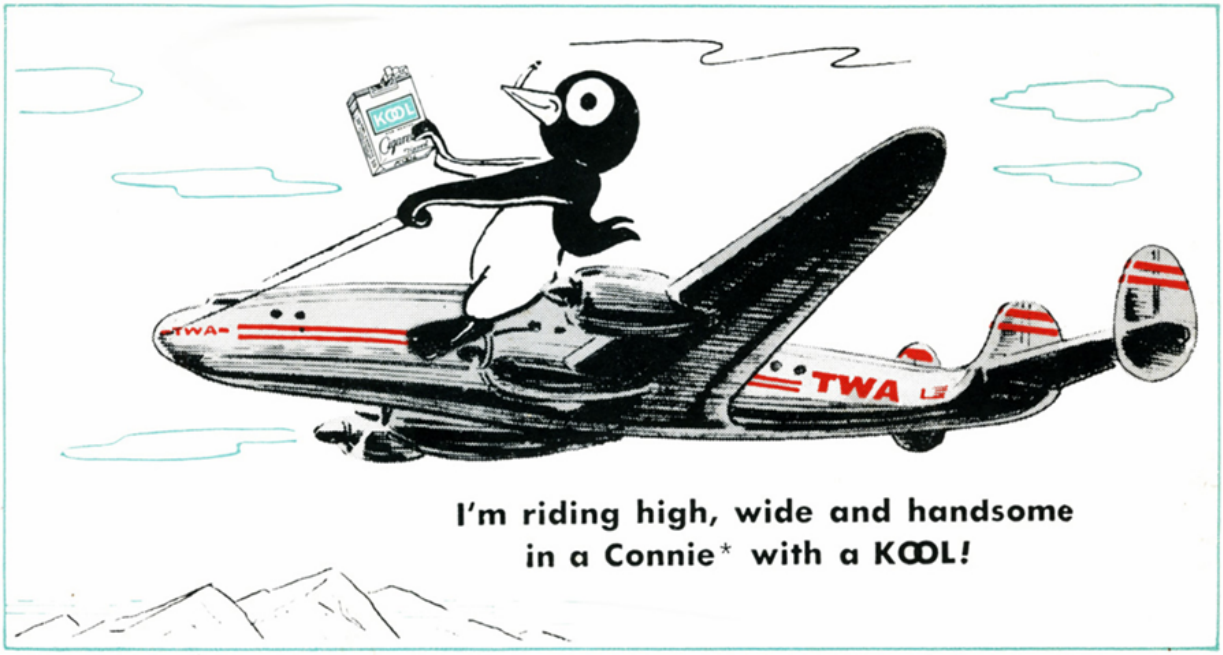
R. J. Reynolds Tobacco Company cleverly features famous trans-continental pilot Roscoe Turner in the "Get a Lift" campaign.

[8] Stanford, "Tobacco Advertising Themes."

Figure 3: Airline Companies use tobacco products to promote flying.

American Airlines Man Smoking Vintage (1939)

(clockwise from left) American Airlines (1939), Pan American Airlines (1952), and Trans World Airlines (1945).[9]



[9] Stanford, "Tobacco Advertising Themes."

Agenda Setting

The in-flight smoking issue needed multiple streams of support to get onto the public agenda, and to become sustainable policy. In accordance with John Kingdon's Multiple Streams Model[10] for public agenda setting, there were three process streams going on at once: the problem of public health and safety, controversial proposals, and the politics of smokers and non-smokers' rights. The problem of public health and safety pertaining to in-flight smoking was indirectly brought to the public agenda through the landmark 1964 U.S. Surgeon General (SG)[11] Report identifying smoking as a significant health risk. In 1969, controversial policy proposals were entered onto the public agenda through two public petitions for rulemaking related to in-flight smoking made to Federal Aviation Administration (FAA)[12]. These proposals spurred conflicting arguments for smokers and non-smokers rights through advocacy coalitions, private industry, and the American public.

Although the 1964 U.S. SG report didn't specifically identify in-flight smoking as an issue, it did initiate the idea of smoking as a public health concern. Along with linking smoking with various health disorders through multiple international studies, this report identified an increase in incidence of lung cancer among American's from 1900 to 1960, ironically the same period of increased cigarette consumption.[13] While previous studies had been published elsewhere showing the negative health effects of tobacco use, the credibility behind this report served to change the tide of popular public opinion, with cigarette consumption declining thereafter. A follow-on SG report in January 1972 became the "first of a series of science-based reports to identify environmental tobacco smoke (ETS) as a health risk to nonsmokers," [14] providing the evidence necessary to elevate the issue of in-flight smoking on the public agenda.

Consumer advocate Ralph Nader and anti-smoking advocate John Banzhaf were the first to enter the issue of in-flight smoking onto the public agenda, making them what Howlett, Ramesh and Perl would refer to as the "policy entrepreneurs" of U.S. anti in-flight smoking public policy.[15] An attorney dedicated to political battles for public health and safety, Nader was labeled the "THE U.S.'s TOUGHEST CUSTOMER" on the cover of Time Magazine's 12 December 1969 issue following his FAA petition for a complete airlines smoking ban.[16] With a PhD in law, Banzhaf was an active legal force against second-hand smoke when he filed an FAA petition seeking separate smoking and non-smoking sections.[17] Among many endeavors on behalf of public interest, Banzhaf founded Action on Smoking and Health (ASH) in 1967, a national nonprofit, uniquely using scientific and educational power to drive legal action against smoking.[18] While the FAA did not respond to these petition directly, citing "lack of evidence that tobacco smoke was harmful in the concentrations experienced on aircraft,"[19] the FAA did reach out in attempt to gauge the American public opinion on the matter soon after through the

[10] John W. Kingdon and James A. Thurber, *Agendas, Alternatives, and Public Policies*, Chapter 5.
[11] DHHS, "History of the Office of the Surgeon General." The Surgeon General of the United States is the nation's leading spokesman on matters of public health.
[12] FAA, "A Brief History of the FAA." After many phases of development, today's Federal Aviation Administration (FAA) was officially established in 1967. The FAA was initiated by the 1926 Air Commerce Act, the first national action to improve and maintain aviation safety standards.
[13] U.S. Department of Health, Education and Welfare, "Smoking and Health."
[14] CDC, "Highlights: Tobacco Timeline."
[15] Michael Howlett, M. Ramesh, Anthony Perl, *Studying Public Policy: Policy Cycles and Policy Subsystems*, Chapter 4.
[16] Time Magazine, "THE U.S.'s TOUGHEST CUSTOMER."
[17] Peggy Ann Lopipero and Lisa A Bero, "Tobacco Interests or the Public Interest."
[18] ASH, "Prof. John Banzhaf's Background in Antismoking."
[19] A.L. Holm and R M Davis, "Clearing the airways: advocacy and regulation for smokefree Airlines."

Advanced Notice of Proposed Rule Making (NPRM) in March 1970.[20] Mandated by Congress, an NPRM is issued from government agencies to the American public when considering adding, altering or removing any regulations in the rulemaking process. Advanced NPRMs are rare for the FAA, signifying that FAA seeks only to gauge public opinion to a novel rulemaking concept. Believing "the petitions warranted an in-depth study to determine to what extent tobacco smoke was harmful to nonsmokers,"[21] FAA's Advanced NPRM sought to find out if the American public truly felt smoking aboard aircraft was a safety concern and if there was a desire for regulation. The resulting lack of evidence and support caused the issue only to lower in priority and remain shelved on the public agenda for the next couple of years.

Arguably, most phases in the public policy process pertaining to in-flight smoking were influenced by the actions of private industry. Whether or not they realized it, the airliners were the private industry actors who wielded the indirect power,[22] or the power to decide agenda items in the agenda setting phase. Possibly unintentionally, the company policies of these non-state actors created 'policy windows,' a term coined by Kingdon referring to public agenda setting opportunities that are only available for a limited period of time, like an open window.[23] With a combination of the public attitude towards smoking declining and new public policy passed in 1969 limiting tobacco advertisement, airliners began to test the marketability of private in-flight smoking policies. In 1971, United Airlines was the first airline to offer separate smoking and nonsmoking sections, which may have influenced the Civil Aeronautics Board (CAB)[24] considering of a similar rule on the agenda.[25] Perhaps the most influential window of opportunity opened in 1973 with an incident that had little to do with Americans. In July 1973, an in-flight lavatory fire on a U.S. designed aircraft operated by a Brazilian airline company flying into Paris killed 123 passengers aboard.[26] This tragedy solidified the safety related in-flight smoking concern for the FAA. Muse Air's decision to go smokefree in 1982 may have been an example available for anti-smoking lobby groups to exploit in their attempts to influence the public agenda. In 1986, Americans for NonSmokers' Rights (ANR) used the airline example's in their controversial article, "Where There's Smoke, There's Fire: Banning Smoking on Airplanes," re-ignited the issue of in-flight smoking on the public agenda, initiating a campaign to eliminate in-flight smoking.[27] Subsequently, more in-flight smoking restrictions were imposed in 1987. Then the public agenda was further influenced by Northwest Airline's self-imposed complete in-flight smoking ban on domestic flights, leading to enhanced public policy in 1989 and 1990. Following suit with 100% smokefree policies worldwide were the airlines, Delta in 1995, Trans World Airlines (TWA), United and American in 1997, and Virgin Atlantic in 1998, as well as nearly all major foreign airline companies.[28] Private policies restricting in-flight smoking were popular among the airline industry as they significantly reduced cabin cleaning costs, and smoker and

[20] FAA, "Smoking on Aircraft Operated by Air Carriers, Air Travel Clubs, and Commercial Operators."
[21] Edmund Preston, ed., *FAA Historical Chronology: Civil Aviation and the Federal Government, 1926-1996*.
[22] Kevin B. Smith and Christopher Wesley Larimer, *The Public Policy Theory Primer*, Chapter 4.
[23] Michael Howlett, M. Ramesh, Anthony Perl, *Studying Public Policy: Policy Cycles and Policy Subsystems*, Chapter 4.
[24] Douglas B. Harris, "Civil Aeronautics Act (1938)." The Civil Aeronautics Authority (CAA) was established through the Civil Aeronautics Authority Act of 1938 and renamed the Civil Aeronautics Board (CAB) in 1940. The CAB was the agency charged with the power to regulate the economic aspect of air transportation and to supervise air carriers as well as their property, property rights, equipment, facilities, and franchises. The Civil Aeronautics Boards Sunset Act of 1984 disbanded the CAB.
[25] ANR, "Flying the Smokefree Skies: Milestones."
[26] Edmund Preston, ed., *FAA Historical Chronology: Civil Aviation and the Federal Government, 1926-1996*.
[27] ANR, "Smokefree Transportation Chronology."
[28] ANR, "Smokefree Transportation Chronology."

non-smoker passengers alike found the on-board environment more comfortable. These policies clearly influenced the public agenda as similar policies were introduced in the Senate in 1999.

Formulation

Public policy restricting in-flight smoking formulated over a long period of time through blended phases of the policy process and the use of interrelated tools, with multiple state and non-state actors. A few of the common policy formulation tools that appear to have been used in the in-flight smoking issue process are identified by Howlett, Ramesh and Perl are nodality or information-based, authority-based and organization-based.[29] The FAA's Advanced NPRM might vaguely be viewed as nodality or information-based tool since it was a public information gathering campaign seeking public opinion. Authority-based tools are clearly used by the airline industry through self-regulation and the government through command-and-control. United Airlines self-regulated with their segregation of smokers from non-smokers in 1971, and the CAB took command-and-control measures when they issued a Notice of Proposed Rule Making (NPRM) in September 1972 to inform the public and solicit feedback on the first potential public policy to regulate in-flight smoking.[30] While each law passed providing piecemeal restrictions on in-flight smoking might be viewed as decision-making phases in the policy process, the laws could also by interpreted as command-and-control regulation in one extensive formulation phase leading up to the final complete ban in 2000.

It is important to understand that the FAAs statutory responsibility lies in aviation safety, not health. FAA relies on guidance from their parent organization, Department of Transportation (DOT) and mandates from Congress to provide regulations related to health factors in transportation. Therefore, FAA has been slow to implement any anti-smoking rules until there is clear safety concern. Spurring FAA policy formulation, was the National Academy of Sciences (NAS)[31] 1986 publication "The Airliner Cabin Environment: Air Quality and Safety," which recommended a "ban on smoking on all domestic commercial flights," reporting that tobacco smoke exposure to flight attendants was essentially deadly.[32] FAA policy formulation was also influenced by the international community through their membership with 191 other countries in International Civil Aviation Organization (ICAO), a United Nations special agency that establishes international aviation safety standards. In June 1992, through a majority vote of their member states, ICAO urged the international aviation community to go smokefree, which pressured the FAA to increase in-flight smoking regulations.[33] Setting a new standard for FAA policy formulation, DOT announced in May 1996 that certain U.S. air carriers agreed to implement smoking curbs, making about 80% of non-stop scheduled U.S. airline flights between the United States and foreign countries smokefree.[34]

Even with the self-regulation of some airliners, aviation and tobacco industries continued to hold strong positions in American popular culture and were often depicted together in advertisements. Flight attendants were popularly used as models (Figure 4) for promoting

[29] Michael Howlett, Michael Ramesh, and Anthony Perl. *Studying Public Policy*, Chapter 5.
[30] CDC, "Highlights: Tobacco Timeline."
[31] NAS, "About NAS: History." National Academy of Sciences (NAS) was founded by a group of scientists as a non-profit society of distinguished scholars in Cambridge, Massachusetts, at the height of the Civil War. Established by an Act of Congress, signed by President Abraham Lincoln in 1863, the NAS is charged with providing independent, objective advice to the nation on matters related to science and technology. Members serve pro bono as "advisers to the nation on science, engineering, and medicine".
[32] ANR, "Flying the Smokefree Skies: Milestones."
[33] ANR, "Flying the Smokefree Skies: Milestones."
[34] Edmund Preston, ed., *FAA Historical Chronology: Civil Aviation and the Federal Government, 1926-1996*.

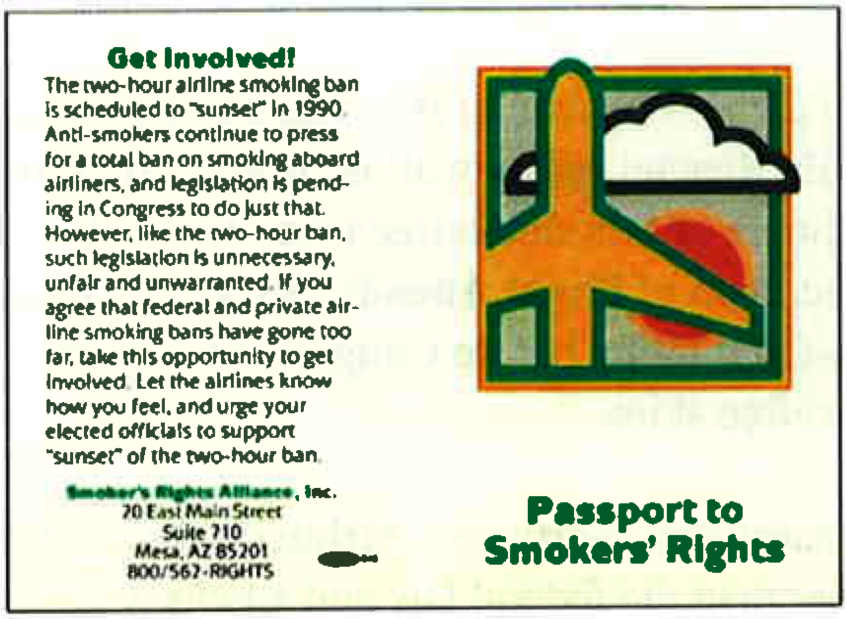
cigarettes and many airlines distributed free cigarettes to passengers.[35] The Tobacco Institute's "Smokers' Rights Alliance" launched a campaign in 1988 attempting to influence Congress and the FAA against the adoption of policies restricting in-flight smoking (Figure 5).[36] At the same time, opposing forces were also working to influence the formulation stage. Health advocated took advantage of the policy window of opportunity that had been opening ever-widely by the influx of knowledge on tobacco's negative health effects. American culture had finally begun to shift with public and political attitudes towards tobacco coming to a critical point for formulation. Many popular newspapers relayed this cultural change towards smokefree flights through editorials, such as shown in the 1984 edition of the Chicago Tribune in Figure 6. Of course, tobacco companies fought back any way they could in a losing battle to stop the formulation process (Figure 7).

Figure 4: Cigarette advertisement featuring a model flight attendant.[37]

Figure 5: Private interest group effort to block policy formulation.[38]

[35] ANR, "Flying the Smokefree Skies: Milestones."
[36] ANR, "Flying the Smokefree Skies: Milestones."

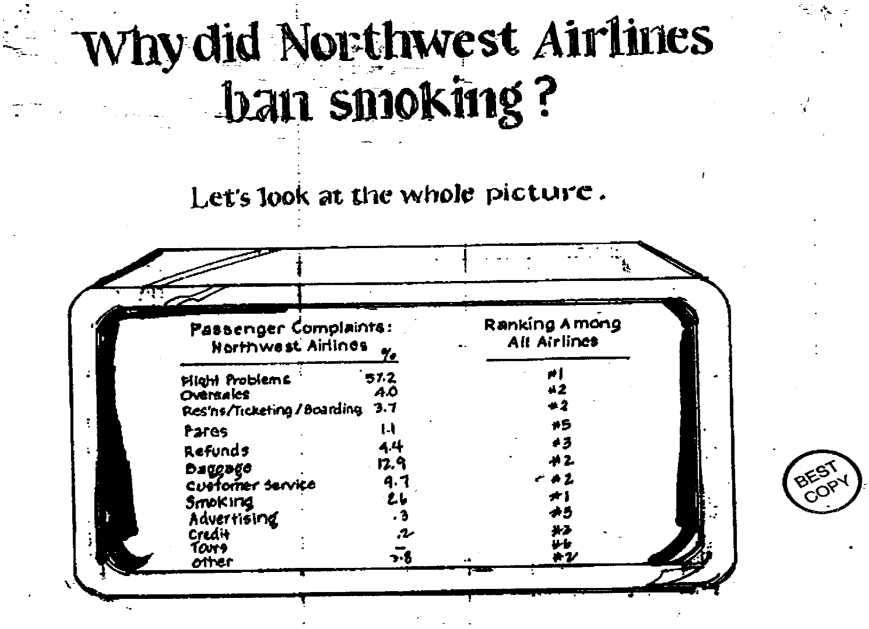
[37] ANR, "Flying the Smokefree Skies: Milestones."
[38] A.L. Holm and R M Davis, "Clearing the airways: advocacy and regulation for smokefree Airlines."



"Material from the Tobacco Institute's "Passport to Smokers' Rights" Advocacy campaign. This kit contained an "Issue Brief" on airline smoking restrictions, detailed instructions for a letter writing campaign, pre-printed postcards to be sent to airlines and the U.S. Department of Transportation, and membership information for the Smokers' Rights Alliance, Inc."

Figure 6: Editorial cartoon demonstrating the smokefree flight campaign encouraged by popular culture.

Figure 7: Depiction of tobacco industry attempt to influence public opinion and stop policy formation.


Why did Northwest Airlines ban smoking?

Let's look at the whole picture.

Passenger Complaints: Northwest Airlines	%	Ranking Among All Airlines
Flight Problems	57.2	#1
Oversales	4.0	#2
Res'ns/Ticketing/Boarding	3.7	#2
Fares	1.1	#5
Refunds	4.4	#3
Baggage	12.9	#2
Customer Service	9.7	#2
Smoking	2.6	#1
Advertising	.3	#5
Credit	.2	#2
Tours	–	#6
Other	3.8	#2

BEST COPY

Draft advertisement ran by RJ Reynolds against Northwest Airlines after the airline went voluntarily smokefree.[39] This image shows smoking as low on the priority list of airline customer complaints.

Decision-Making

[39] R.J. Reynolds, "Why Did Northwest Airlines Ban Smoking."

U.S. national public policy restricting in-flight smoking experienced the first positive decision-making in 1973, entering a process that would prove to adhere to an incremental model with piecemeal policies that followed up until the comprehensive in-flight smoking ban in 2000. The Civil Aeronautics Board published the first rule related to smoking on aircraft in 1973 "for reasons of consumer comfort and protection," which required segregated smoking and non-smoking sections. In partial response to National Transportation Safety Board (NTSB)[40] recommendations following the tragic Varig Airlines crash in 1973, FAA passed rules increasing safety inspections "to ensure fire containment capability, as well as preflight briefings and other steps aimed at preventing passengers from smoking in lavatories."[41] In June 1984, the Civil Aeronautics Board followed up in 1984 with an in-flight smoking ban on airlines with fewer than 30 passenger seats and all grounded aircraft. In 1987,[42] California was first to completely ban in-flight smoking on all flights to, form and within the state. 1987 marked the first year of Congressional action and the beginning of nationally imposed in-flight smoking restrictions. National law began with an ban on in-flight smoking on flights 2 hours or less in duration in 1987, which extended to 6 hour or less flights in 1989, and finally a complete smoking on airlines ban in 2000.[43] In 2000, the Wendell H. Ford Aviation Investment and Reform Act made all U.S. flights 100% smokefree.[44] The comprehensive U.S. ban was predicated by events in foreign relationships, whereas the U.S. entered into an agreement with Canada and Australia to ban smoking on flights between the three nations in 1994. DOT granted anti-trust immunity permitting airlines to discuss smoking bans.

Figure 8: Lobby groups claim victory for effecting policy restricting in-flight tobacco use.[45]

Implementation

[40] NTSB, "History of The National Transportation Safety Board." National Transportation Safety Board (NTSB) is an independent U.S. government investigative agency established in 1967 responsible for civil transportation accident investigation. NTSB investigates and reports on transportation related accidents and incidents. When requested, the NTSB will assist the military and foreign governments with accident investigation.
[41] Edmund Preston, ed., *FAA Historical Chronology: Civil Aviation and the Federal Government, 1926-1996.*
[42] Edmund Preston, ed., *FAA Historical Chronology: Civil Aviation and the Federal Government, 1926-1996.*
[43] Edmund Preston, ed., *FAA Historical Chronology: Civil Aviation and the Federal Government, 1926-1996.*
[44] Edmund Preston, ed., *FAA Historical Chronology: Civil Aviation and the Federal Government, 1926-1996.*
[45] Robert Wood Johnson Foundation., "Culture of Health."

With many of the major airliners already ahead of national policy with anti-smoking rules, implementation was relatively simple for the national agencies involved, without the appearance of goal displacement actions or organizational cheating. The FAA adheres to Title 49 of the U.S. Code of Federal Regulations (CFR), which is the section containing all laws pertaining to transportation. Title 49 tells the FAA to write rules prohibiting smoking on all scheduled passenger interstate, intrastate and international flights, requiring airplane lavatories to have ash trays regardless of whether smoking is allowed, and instructing the crew to provide a minimum level of warning to passengers against smoking through verbal and written communication and visuals such as lighted signs and placards. Whenever a president has signed a bill into law creating national policies towards in-flight smoking, the FAA has created rules to implement those policies. Other angles of implementation might be viewed as supplementary; whereas rules may be creating adding to national policies, making them more stringent. Usually, rules cannot be created relaxing national policies. The 1987 California in-flight smoking ban might be viewed as an over-achieving method of implementing the national restriction on in-flight smoking within a limited duration.

Evaluation

Market functions and public opinion are usually the best indicators of whether a policy is effective, and are the best areas to evaluate. In 1989, American Association for Respiratory Care (AARC) released a public opinion survey on in-flight smoking which showed the approval of smokefree flight laws by 92.8% non-smoker and 58.1% smoker airline passengers. With smokefree flight approval ratings this high this early, a complete smoking ban was clearly foreshadowed, and it was amazing that it took until 2000 to get it into place. What is even more remarkable are the continued attempts of tobacco industry lobby groups to reverse in-flight smoking policies, as seen in their failed Congressional testimony in Figure 9.

Evaluation of in-flight smoking policies seemed to have occurred in a post-positivist way, with airline industry self-imposed policies proving positively marketable, clear public and private research results, and media and public opinion showing favor. All these streams provided an indirect level of evaluation for public policy that seemed to override any need for an "objective, systematic, empirical examination"[46] of ongoing in-flight smoking policy effects on public targets or goals. Furthermore, policy learning appeared to occur naturally, with public policies somewhat easily following the sway of airline industry choices and public opinion, remaining on-pare with the evolution of popular culture.

In my own evaluation of the in-flight smoking policy process, while I like that the phase events rightly seem to unfold in line with the desires of the majority of American people, I can see how national regulations could have been both more and less robust with the same end result. Research results were well digested by the public, as seen by the shift in cultural attitude towards public tobacco use. Airliner self-imposed in-flight smoking restriction policies were profitable and popular. Thus, it appears that culture and public markets would have naturally eliminated public tobacco use without national intervention. On the other hand, it could be argued that the government shouldn't wait around for popular culture to catch up to reasonable policy concepts. Perhaps the national government should have banned public smoking on airlines and in all areas as early as the U.S. SG report confirmed the negative effects of "environmental smoke" in 1972. If the health risk wasn't enough, then the addition of the safety risk from the deadly 1973 in-flight fire should have been enough to fast-track national policy. The question of whether American's would like their government to follow the cultural lead or act in the public's best

[46] Michael Howlett, Michael Ramesh, and Anthony Perl. *Studying Public Policy*, Chapter 8.

interest has likely come up throughout every phase of every policy process on ever subject the U.S. has ever encountered. It is the ability of the American people to continually debate this and almost every other public policy question that makes our government so unique, and this trait is not likely to shift anytime soon.

Figure 9: Lobby groups claim victory for effecting policy restricting in-flight tobacco use.[47]

Implications

Since the mid-1960s, as American's became increasingly knowledgeable of tobacco effects on health, the tobacco industry has continued to lose their stronghold in popular culture, and their grip on consumer attention. Arguably, each new piece of researched information released spurred a new issue-attention cycle, with each cycle building upon the last on in policy formation. It was only because of their power over and popularity among consumers in the first half of the 20th century that enabled the tobacco industry to remain present in the realm of air transportation for the second half of the 20th century. Since the complete in-flight smoking ban in 2000, more public policies restricting tobacco use have been implemented in other arena's, making the future of in-flight smoking laws ever more permanent and irreversible. The U.S continued anti-smoking movement likely to continue to influence the world's airline industry. U.S. participation in the 2005 International Public Health Treaty sponsored by the World Health Organization (Figure 10) and U.S. public policies such as the 2009 Family Smoking Prevention and Tobacco Control Act (Figure 11) symbolize what American popular culture is today; a culture that prioritized health as a measure of public safety.

Figure 10: Lobby groups claim victory for effecting policy restricting in-flight tobacco use.[48]

[47] Robert Wood Johnson Foundation., "Culture of Health."
[48] Robert Wood Johnson Foundation., "Culture of Health."

Figure 11: Lobby groups claim victory for effecting policy restricting in-flight tobacco use.[49]

[49] Robert Wood Johnson Foundation., "Culture of Health."

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