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**Tobacco Interests or the Public Interest:
Twenty-years of Tobacco Industry Strategies to Undermine Airline Smoking Restrictions**
(Full Manuscript)

Peggy Lopipero, M.P.H. and Lisa Bero, Ph.D.

Abstract

We studied twenty years of tobacco industry strategies to undermine federal restrictions of smoking on aircraft using internal records, public documents, and other related research. The industry viewed these restrictions as a serious threat to the social acceptability of smoking. It's initial efforts included covert letter-writing campaigns and lobbying of the airline industry, but with the emergence of proposals and public support to ban smoking, the tobacco companies, working primarily through the Tobacco Institute, engaged in ever increasing efforts to forestall further restrictions. Tactics to dominate the public record became especially rigorous. The industry launched an aggressive public relations campaign that began with the promotion of industry sponsored petition drives and public opinion surveys. Results of its' polling research that produced findings contrary to the industry's position were not revealed. In order to demonstrate smoker outrage against a ban, later efforts included the sponsorship of smokers' rights and other front groups. Congressional allies and industry consultants sought to discredit the science underlying proposals to further restrict smoking and individual tobacco companies conducted their own cabin air quality research. Faced with the potential of a smoking ban on all domestic flights, the industry sought to intimidate an air carrier and a prominent policymaker. In the early years, the tobacco industry framed the debate as one of individual rights and government intrusion, and only acknowledged that the presence of tobacco smoke in cabin air might be annoying to some sensitive individuals. As evidence about the harms of secondhand smoke accumulated, the industry attempted to reframe the issue as one of irritation and that smoking was unfairly held responsible for poor cabin air quality. Despite the intensification of tactics over time, including mobilization of an army of lobbyists and Congressional allies, the tobacco industry was ultimately defeated. Our longitudinal analysis provides insights into how and when the industry changed its plans and provides public health advocates with potential counterstrategies.

Introduction

As a consequence of litigation in the 1990s, the tobacco industry has been required to make public millions of internal documents produced in discovery from civil actions involving smoking and health. The availability of these records has offered unprecedented opportunities to closely examine the inner workings of an economically and politically powerful interest group in its efforts to influence policymaking.

It is neither illegal nor unusual for business groups to aggressively lobby against government actions perceived as detrimental to their interests. However, the tobacco industry is notable in its ability to resist or otherwise weaken restrictions of its products, particularly at the federal level. A brief history of federal actions on tobacco and other key events from the 1960s through 2000 is chronicled in Table 1. Of the federal regulations adopted in the period, some have been described as partial victories for the cigarette manufacturers and their allies¹⁻³. The Cigarette Labeling and Advertising Act of 1965 resulted in a watered-down warning label requirement, temporarily eliminated the Federal Trade Commission's power to regulate cigarette advertising, preempted states from adopting more severe warning labels and advertising laws, and served to shield the cigarette manufacturers from product liability suits¹⁻³. In 1967, the Federal Communications Commission obligated any radio or television station carrying cigarette ads to provide free airtime to antismoking public service announcements (PSAs). The PSAs were considered largely responsible for the reduction in cigarette consumption and the increased public awareness of the harms of smoking noted during the three years the ads were aired^{1,2}. As a consequence, the Public Health Cigarette Smoking Act that mandated a ban of cigarette advertising on all airwaves while simultaneously eliminating the requirement for the antismoking PSAs was supported by the tobacco industry and its' allies in Congress.

The time period is also marked by significant omissions of tobacco products from important pieces of consumer, workplace, and environmental legislation. Only the 1960 Federal Hazardous Substances Act had not explicitly excluded tobacco products. However, the legislation was amended in 1975 and tobacco was removed from the Act's jurisdiction³. In 1963, the Occupational Safety and Health Administration (OSHA) set limits on worker exposure to twenty-four of the airborne pollutants and substances present in tobacco smoke, yet declined to regulate exposure to secondhand smoke (SHS)³. Tobacco products were also excluded from the 1966 Fair Labeling and Packaging Act, the 1970 Controlled Substances Act, the 1972 Consumer Product Safety Act, and the 1976 Toxic Substances Act owing to the economic and political strength of the tobacco lobby and its allies in Congress^{3,4}. By 1994, OSHA proposed the first federal indoor air quality regulation that prescribed strict limits on workplace smoking. After seven years of deliberations, OSHA withdrew the proposal in 2001⁵. Conspicuously absent from its jurisdiction since the Food and Drug Act's inception, the Food and Drug Administration (FDA) attempted to regulate the sale of cigarettes and smokeless tobacco to children and adolescents in 1996. The tobacco industry immediately filed suit to stop its implementation and in 2000, the Supreme Court invalidated the rule citing that the FDA lacked the statutory authority to regulate tobacco⁶.

The emergence of involuntary exposure to tobacco smoke as a public health concern began in the early 1970s (Table 1). In a 1971 speech, Surgeon General Jesse L. Steinfeld stated:

“Evidence is accumulating that the nonsmoker may have untoward effects from the pollution his smoking neighbor forces upon him... It is high time to ban smoking from all confined public places such as restaurants, theatres, airplanes, trains and buses. It is time that we interpret the Bill of Rights for the Nonsmoker as well as the Smoker”^{7,8}.

The 1972 U.S. Surgeon General’s report on smoking and health was the first major document to examine the evidence on “public exposure to air pollution from tobacco smoke”⁹. The report concluded that SHS may exacerbate allergic symptoms; carbon monoxide in smoke-filled rooms may harm the health of persons with chronic lung or heart disease; and that tobacco smoke contains hundreds of compounds, several of which have been shown to act as carcinogens, tumor initiators, and tumor promoters. In 1986, two separate reports of the Surgeon General and the National Research Council (NRC) of the National Academy of Science (NAS) focused entirely on involuntary smoking and concluded that SHS is both a lung carcinogen and a respiratory toxin^{10,11}. In the preface to his report, Surgeon General Koop stated: “The rights of smokers to smoke ends where their behavior affects the health and well-being of others”¹⁰. The same year, the NAS issued its report on the airline cabin environment and called for a total ban of smoking on all domestic commercial flights¹². By the early 1990s, the Environmental Protection Agency finalized its health risk assessment and classified SHS as a known human carcinogen¹³.

Despite the emerging evidence, several authoritative reports, and the recommendations of the Surgeon Generals, there have been few instances of federal government intervention to restrict public smoking (Table 1). The requirement of smoking sections on passenger aircraft represented the first federal restriction of exposure to SHS and set precedents for companion rules implemented in subsequent years on other public conveyances. Otherwise, most policies to restrict public smoking continue to be adopted at the local and state level. The passage of the smoking ban on passenger flights of 2 hours or less in 1987 marked a change in the legislative environment regarding smoking issues¹⁴ and was described by Reps. Bill Young (R-FL) and Richard Durbin (D-IL) as the first time Congress had defeated the tobacco lobby^{15,16}. The extension of the smoking ban to nearly all domestic flights two years later reinforced the significance of the legislation as a statement by Congress that smoke free indoor air was a national priority and that exposure to SHS constitutes a health hazard to the public and to workers¹⁴.

Internal documents reveal that the tobacco industry viewed public smoking restrictions as a grave threat, particularly if adopted at the national level^{17,18}. One early example of the estimated economic impact is illustrated in the following quote from a 1974 presentation to executive and tobacco manufacturers of RJ Reynolds:

“However, let’s just assume that every smoker in the country is confronted by some smoking restriction once a week and that that ban reduces his cigarette consumption by one cigarette. As a result, the profits lost by the industry in one year would total 8.2 million dollars. Thus what may seem to be a very small drop in individual consumption, can actually amount to a significant reduction in profits.”¹⁷

More importantly, the social acceptability of the use of tobacco products was believed to be at stake. The industry feared that the adoption of smoking restrictions would snowball and that smokers would be increasingly inhibited

to light up even when they had the opportunity to do so^{17, 18}. A 1976 report on corporate priorities and public policy prepared for the Tobacco Institute (TI)¹ concluded that the issue of passive smoking “may be the most serious long run threat to the industry, a threat far greater than the new public policy restrictions on marketing or advertising”²¹². An anonymous document from the files of Philip Morris outlining an “Action Plan for ETS [environmental tobacco smoke] in Europe” indicated that smoking restrictions in the workplace and on airlines were especially worrisome for the industry:

“The key area of dispute will be restrictions upon smoking in the workplace... A second area of importance is in-flight smoking aboard commercial aircraft. In-flight restrictions receive broad publicity and encourage the adoption of other prohibitions elsewhere”²⁴.

Research using tobacco industry documents has exposed its efforts to defeat policies restricting smoking in the workplace at the state and federal level. Internal records clearly outlined how the industry planned to prevent passage of a strong statewide clean indoor air law in Maryland. Analysis of the regulatory hearings and media coverage showed that the industry was successful in increasing business representation and the use of economic arguments at public hearings, but did not succeed in its efforts to increase unfavorable media coverage during the regulatory proceedings²⁵. Examination of tobacco industry documents, public commentary, and media coverage revealed five plans of attack to defeat Federal OSHA’s proposed workplace smoking regulation: (1) maintain scientific debate and controversy regarding SHS (2) delay agency deliberations (3) expand the rule’s scope to focus on other aspects of indoor air quality (4) recruit and assist labor and business organizations to oppose the rule, and (5) increase media coverage of the tobacco industry position⁵. The industry was successful in implementing each strategy employed.

We chose as our case study tobacco industry efforts to prevent adoption of federal policies governing smoking on commercial aircraft in the United States. As stated previously, the adoption of airline smoking restrictions represented the first federal intervention to protect the public from the hazards of exposure to SHS and

¹ Founded in 1958, The Tobacco Institute (TI) served as the industry’s lobbying and trade association until 1999 when the Institute was closed as part of the Master Settlement Agreement **19**. NYSA. Tobacco Industry Records Held by the New York State Archives. *New York State Archives (NYSA)*. Available at: http://www.archives.nysed.gov/a/researchroom/rr_biz_tobacco.shtml. Accessed 1 Nov, 2004.. The TI’s major activities included legislative and regulatory affairs, and public relations. Institute operations were overseen by a Board of Directors which operated principally through an Executive Committee composed of the CEOs and heads of the tobacco division of each of the five major companies financing the Institute **19**. NYSA. Tobacco Industry Records Held by the New York State Archives. *New York State Archives (NYSA)*. Available at: http://www.archives.nysed.gov/a/researchroom/rr_biz_tobacco.shtml. Accessed 1 Nov, 2004, **20**. Tobacco Institute. Strategic Plan for the Tobacco Institute. Sep 1989. (est.) Bates No. 87649071/87649114. Available at: <http://legacy.library.ucsf.edu/tid/ahs21e00>. Accessed 01 Nov 2004.. The Executive Committee was responsible for making policy decisions on key legislative, regulatory and public affairs issues **20**. Tobacco Institute. Strategic Plan for the Tobacco Institute. Sep 1989. (est.) Bates No. 87649071/87649114. Available at: <http://legacy.library.ucsf.edu/tid/ahs21e00>. Accessed 01 Nov 2004.. The TI’s President managed four divisions: federal relations, state activities, public affairs, and administration. In addition, an eleven member Committee of Counsel provided legal support to the entire Institute and industry **20**. Tobacco Institute. Strategic Plan for the Tobacco Institute. Sep 1989. (est.) Bates No. 87649071/87649114. Available at: <http://legacy.library.ucsf.edu/tid/ahs21e00>. Accessed 01 Nov 2004..

² The research organization Yankelovich, Skelly, and White produced the yearly publication “Corporate Priorities”. The research comprised surveys and interviews among a representative sample of the general public and public policy leaders to track the public, legislative and regulatory trends in specific product category areas for various industries **22**. Corporate Priorities Industry Report Summary. 1977. Bates No. 670525926/670525927. Available at: <http://legacy.library.ucsf.edu/tid/dq150f00>. Accessed 26 Oct 2004.. The research was intended to “help corporations understand and adapt their policies, operations, and communications to the changing public policy environment” **23**. Downing L. Report of Conference Yankelovich Monitor & Corporate Priorities (Ma77-8 & Ma77-9). 22 Feb 1977. Bates No. 680287642/680287643. Available at: <http://legacy.library.ucsf.edu/tid/cuk04f00>. Accessed 26 Oct 2004..

was seen as an issue of great significance to the tobacco industry. Consequently, the internal document archives should contain ample evidence of lobbying and other efforts to prevent the adoption of airline smoking restrictions. Holm and Davis²⁶ have examined the advocacy and regulatory history of the airline smoking bans. Pan et al.,²⁷ have described the importance of the role of flight attendants and public health advocates in securing the industry's defeat. Here we provide a longitudinal examination of the tobacco industry's efforts to fight smoke-free airlines and the evolution of its plans over time. Our analysis provides insights into how and when the industry augmented its strategies and provides guidance for future tobacco control interventions

Methods

Case Definition

We defined the case study and its boundaries as tobacco industry strategies and tactics to influence the policymaking process beginning with the petition to ban smoking on commercial aircraft submitted to the Federal Aviation Administration (FAA) by Ralph Nader in December of 1969 through the implementation of the smoking ban on most domestic flights in February of 1990. The exact boundaries of the case study were established after preliminary analyses of tobacco industry documents during data collection. Although industry activities to influence each rulemaking or legislative proceeding to further restrict or otherwise amend airline smoking policies could be seen as embedded cases, we also included for analysis any evidence of industry plans taking place outside of these specific proceedings (e.g., efforts to intimidate airlines from adopting smoking policies voluntarily, funding related research).

Data Collection

We conducted a comprehensive search of the Legacy Tobacco Documents Library (<http://legacy.library.ucsf.edu/>) and Tobacco Documents Online (<http://tobaccodocuments.org/>) to identify internal records describing strategies to thwart the restriction of smoking on passenger aircraft. Search terms included broad keywords such as airlines, aircraft, airplane, cabin air as well as the names of organizations, individuals, projects, files, bates ranges, and other specific terms identified through snowball searching. Searches took place between August 2003 and July 2004 with periodic updates throughout 2004. These documents comprised our primary data and included memoranda and correspondence, meeting minutes, proposals, reports, publications, presentations, budgets, newsletters, and press releases. We included in our analysis documents produced by other organizations, copies of government records, and news clippings and transcripts identified in the tobacco industry files if they provided evidence of industry tactics and/or the extent of their implementation.

Because our preliminary document search results indicated that industry efforts to undermine airline smoking policies significantly declined after the 1990 adoption of the ban on most domestic flights, we elected to restrict our analysis to strategies and their implementation originating in the late 1960's through 1990 in the United States. After 1990, the tobacco industry sought to forestall the extension of the ban to international flights

by focusing its attention outside the United States and on the International Civil Aviation Organization's call for a worldwide smoking ban. These data are not included here.

We uncovered thousands of documents from the tobacco industry files relevant to our research aims. The majority of these documents came from the files of the Tobacco Institute, Phillip Morris, and RJ Reynolds. In addition, we uncovered 150 pertinent records from the Philip Morris, RJ Reynolds, and Lorillard collections withheld from the courts due to claims of privilege. The inaccessible records were described as correspondence between defense attorneys or between attorneys and industry employees "concerning thoughts and opinions on airline smoking restrictions".

In order to put the identified documents into their historical context as well as to corroborate the degree to which the tobacco industry actually implemented its plans, we supplemented our dataset with government records from relevant congressional hearings, debates, and publications identified both by electronic searches of government websites (www.thomas.gov), LEXIS/NEXIS, and university library databases. We also compiled Federal Register notices, public commentary, hearings, and any meeting minutes from germane regulatory proceedings from the National Archives and Records Administration. Other means of triangulating our data collection included searches of the Internet using the search engine Google, social science, science, and news media databases to identify any related research and documentation especially from flight attendant, aviation, and advocacy groups.

Data analysis

Of over ten thousand pages of pertinent tobacco industry documents, public records, and related research and documentation, we narrowed our in-depth review and synthesis to approximately 600 records that most thoroughly provided evidence of tobacco industry efforts and their implementation to undermine the first federal restriction of public smoking in the United States. Our interpretative data analysis involved iteratively reviewing the documents, categorizing the strategies and tactics, and summarizing findings. The categorization of the data was partly deductive and based on the types of lobbying activities described by Wright²⁸ and tobacco industry strategies identified by the Advocacy Institute^{29,30} and our own research⁵. Otherwise, coding of record contents was inductive.

We begin with background information on the airline cabin environment and a historical overview of the airline smoking policy process. The results are presented first as a twenty-year synopsis of the tobacco industry's response to the continued threat of regulation followed by a more in-depth presentation of its' strategies and tactics arranged categorically and chronologically. We end with a discussion of the implications of the case study and provide recommendations for change.

Background and Historical Overview

Cabin Air Environment

The commercial aircraft cabin is a unique confined environment. Passengers and crew are exposed to a combination of very low humidity, low partial pressures of oxygen (equivalent to an altitude of about 6000 to 8000 feet), high concentrations of carbon dioxide (five times higher than in most buildings), cosmic radiation, microorganisms, ozone, and other pollutants^{12,31,32}. The aircraft cabin provides the smallest available airspace per person of any social venue and is estimated at one tenth that of a typical office worker or of a spectator in an auditorium^{32,33}. Unlike older aircraft that brought fresh air into the airline cabin at the equivalent of one complete air exchange every 3 to 4 minutes³⁴, by the 1980's the majority of new airplanes used a combination of outside air with approximately 50 percent re-circulated air in order to conserve fuel¹². In the early 1960s, standard practice on aircraft was to supply on average approximately 25 cubic feet per minute (cfm) of air per person³⁵. By the 1980s, these ventilation rates dropped to 7 cfm per person in economy class, while first class passengers were exposed to 30 to 50 cfm per person¹². The current aircraft design standard for the minimum cfm per occupant is less than one-half to two-thirds the ventilation rate recommended for building environments by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers Standard 62-1999 (20 cfm per person)³¹.

Available exposure information suggests that environmental factors, including air contaminants, could be responsible for some of the numerous complaints of acute and chronic health effects by passengers and crew^{12,31}. The existing data collection systems administered by the National Air and Space Administration (NASA) and the Association of Flight Attendants (AFA), do not have standardized, systematic methods to gather and record these reports³¹. Furthermore, the myriad health complaints are broad and nonspecific making it difficult to identify or distinguish a particular illness or syndrome. Consequently, it has been difficult to establish causal relationships between individual aspects of cabin air quality and the health effects observed^{12,31}. Few formal studies have examined the health of airline passengers and crew. Most of the available data suffer from biased selection of study subjects, the absence of comparison groups, inadequate response rates, and lack of exposure information^{12,31}. One evaluation of occupational health statistics found that flight attendants had higher rates of respiratory disease, otitis media, infections and diseases of the inner ear relative to other California workers³⁶. A 1978 survey of flight attendants found a high prevalence of eye irritation (95% of 774 who responded) with over 90% reporting smoking as a cause of their discomfort³⁷. The study's conclusions were limited due to self-selection of subjects and by the lack of a control group.

In 1970, the Federal Aviation Administration (FAA) and the National Institute for Occupational Safety and Health (NIOSH) conducted the first government funded investigation of cabin air quality. The study included an ambient air assessment of SHS surrogates and a questionnaire survey on twenty military and fourteen domestic civilian flights³⁴. The report concluded that inhalation of tobacco smoke by-products did not present a significant health hazard to nonsmoking airline passengers. The measurements of carbon monoxide, total airborne particulates, and polynuclear and other hydrocarbons were described as extremely low owing to the rapid

exchange of air aboard the aircraft. However, results of the survey indicated that a significant proportion of nonsmoking passengers (over 60%) were bothered by tobacco smoke and suggested that corrective action be taken such as the segregation of the smokers. Over 70% of the nonsmokers who had a history of respiratory conditions expressed annoyance from tobacco smoke. In addition to passenger complaints, the study found tobacco smoke has resulted in malfunctioning of delicate instrumentation and that particulate matter from burning tobacco had caused pressure control valves to malfunction, resulting in decompression of aircraft.

A series of Congressional hearings in 1982 and 1983 on the airline cabin environment^{38,39} led to the enactment of Public Law 98-466. The legislation mandated that the NAS conduct a review of the existing literature to determine whether cabin air quality were adequate for health and safety⁴⁰. The NAS was to determine whether such aspects as the extent of pressurization, the characteristics of humidification, the presence of cosmic radiation, contaminants (e.g., bacteria, fungi, and other microorganisms), and pollutants (e.g., SHS, carbon monoxide, carbon dioxide and ozone) could be responsible for acute or chronic health effects¹². One of the report's major conclusions was that smoking be banned on all commercial flights within the United States for four major reasons: to lessen irritation and discomfort to passengers and crew, to reduce potential health hazards associated with SHS, to eliminate the possibility of fires, and to bring cabin air quality into line with established standards for other closed environments. The study found that filter systems on airplanes were capable of removing particles contained in tobacco smoke but not its gaseous components. Some particles and tars were removed through settling and adsorption onto cabin surfaces¹². The NAS considered means of reducing SHS in aircraft by requiring structural or engineering changes but concluded that such physical barriers were not likely to be economically feasible. The report also found that if the lowest rate of ventilation permitted by current equipment design were used on flights at or near maximum passenger loads, the ventilation systems would provide acceptable air quality *only* if smoking and other contaminant sources were not present (emphasis added)

¹².

Airline smoking policy process

The events leading to the ban of smoking on passenger aircraft in the United States have their beginnings in the late 1960s and culminate in the year 2000 when smoking was banned on all domestic and international flights (Table 1). Public health advocates, Ralph Nader and John Banzhaf figured predominantly in initiating the process. In December of 1969, Ralph Nader petitioned the FAA⁴¹ and the Civil Aeronautics Board (CAB)⁴² to ban the use of tobacco products on all passenger flights arguing that the smoke created an imminent and serious threat of fire, deleterious health effects, and annoyance and discomfort to passengers. The same month, John Banzhaf of Action on Smoking and Health (ASH) petitioned the FAA to separate smokers and nonsmokers on air carriers contending that tobacco smoke in an enclosed environment creates a clear and present danger to persons with pre-existing respiratory conditions and a significant health hazard and source of discomfort to most other passengers⁴³. Meanwhile in Congress, Representative Andrew Jacobs, (D-IN) and Senator Mark Hatfield (R-OR) introduced bills in November (H.R. 14742) and December (S. 3255), respectively, that would require air

carriers to segregate smokers and nonsmokers⁴⁴. Neither bill would make it out of its assigned committee. A similar lack of floor action in the Senate or the House would hold true for every submitted authorization bill that would restrict in-flight smoking from 1971 until 1996 (Table 2). Table 3 provides a detailed account of the evolution of the airline smoking policy process from the aforementioned petitions to ban or segregate smokers through the implementation of the smoking ban on most domestic flights in February 1990.

In March of 1970, the FAA responded to the Nader and Banzhaf petitions by issuing an advance notice of proposed rule making³ soliciting comments on the need to further regulate the smoking of cigarettes, cigars, and pipes on passenger aircraft⁴⁵. The existing rules prohibited smoking only during takeoff and landing. Citing Section 601 of the Federal Aviation Act of 1958 (49 U.S.C. 1421) that authorizes “the Administrator to promote the safety of flight of civil aircraft”, the FAA considered this statutory authority sufficient to prescribe rules to protect nonsmoking passengers from any health risks that might result from involuntary exposure to tobacco smoke. The agency indicated, however, that rulemaking based on grounds of annoyance and discomfort or discrimination against nonsmoking passengers may not be justified under the existing statutory authority. The CAB would have jurisdiction over such issues. Furthermore, the FAA contended that the available evidence did not implicate in-flight smoking as a fire hazard. In a press interview, FAA Administrator John Shaffer indicated that he had “consulted on a personal and unofficial basis with several airline presidents as to their opinion on what might be a reasonable course to pursue in the public interest on this question”⁴⁶. He stated that the general consensus amongst air carriers was that some accommodation could be made by means of segregation. He also noted that the agency was about to begin a one-year joint study with NIOSH of tobacco smoke in air transport.

Three years later, the FAA withdrew its advance notice of proposed rulemaking concluding that there was “no persuasive evidence that exposure to tobacco smoke, in concentrations likely to occur in transport aircraft (assuming normal ventilation rates), is injurious to the health of nonsmokers”⁴⁷. The material upon which the agency based its assessment included: the medical evidence submitted by the petitioners, the comments and medical evidence submitted in response to the notice, the FAA/NIOSH study, the Surgeon General’s 1972 report, and other pertinent material in medical literature. The FAA received approximately 3600 comments, 150 of which were said to be from physicians, dentists, medical associations, health organizations and related affiliations. Almost all of these individuals recommended that the FAA restrict smoking in aircraft arguing that since smoking has been clearly shown to be injurious to the health of smokers, exposure to tobacco smoke is probably also injurious to the health of nonsmokers. However, a number of these commentators conceded that as yet there was no conclusive medical evidence to support these claims. The agency noted that even the Surgeon General had publicly stated that he could not say with certainty that involuntary exposure to tobacco smoke was a cause of serious illness to nonsmokers because the research necessary to establish a causal link had not yet been conducted. The FAA argued that the medical evidence submitted by the proponents of smoking restrictions rested primarily on experiments performed in either unventilated or poorly ventilated enclosures, or contained

³ An advance notice of proposed rulemaking is not a formal proposal to regulate but rather an invitation for public comment on its sentiments regarding a potential rule.

inadequate exposure data on tobacco smoke concentrations. The agency did not consider these experiments relevant to the environmental conditions on modern transport aircraft in which the air in the passenger compartment is replaced approximately every three minutes during flight. The FAA noted, however, that a significant number of commentators and passengers aboard the test flights of the joint FAA/NIOSH study complained of adverse physical reactions beyond annoyance from exposure to tobacco smoke on aircraft. The agency responded that the problem created by smoking on passenger flights for persons suffering from allergies or from diseases which might be exacerbated by the potential irritating effects of tobacco smoke was not greater than that found in most public places.

In the time between the FAA's notice of advance rule making and its decision to not take action regarding in-flight smoking, the CAB initiated rulemaking proceedings to segregate smoking on passenger aircraft in late 1972⁴⁸. The proposed regulation would require (1) that the airlines set aside at the rear of each compartment of the aircraft a section to be designated as a smoking area and prohibit smoking in all other seats; (2) that the number of seats designated as nonsmoking be sufficient to accommodate all interested passengers; and (3) that the airlines enforce the rule. The Board received formal comments⁴ from the Air Transport Association (ATA), which represents most domestic air carriers, with individual supplementary comment from seven individual airlines. Only one airline wrote in favor of the rule. Two carriers opposed the rule and requested exemption status if the regulation were adopted. Ralph Nader and the Aviation Consumers Action Project (ACAP) filed formal comments asking for a complete ban of smoking while ASH went on record in favor of segregation of smokers and nonsmokers. Five members of the public filed formal comments (two proponents and three opponents) and approximately 4500 letter comments were received by the CAB, most of which were in favor of the proposed rule (no further breakdown provided). The agency adopted the "no smoking" areas provision aboard aircraft for reasons of consumer comfort and protection in May 1973⁴⁹. The proposal requiring that smoking sections be placed at the rear of the aircraft was rejected leaving the designation to each airlines' discretion. In its ruling, the Board noted that the recently adopted resolution by the members of the Air Transport Association (ATA) to voluntarily impose smoker segregation on its passenger flights had not offered an adequate remedy and that the resolution was "so vague and general that it cannot reasonably be expected to be more effective"⁴⁹. The regulation went into effect July 1, 1973.

In subsequent years until the agency's sunset in 1985, the CAB would remain enmeshed in an on-going sequence of rulemaking proceedings, enforcement actions, lawsuits, and flip-flops regarding its smoking regulations⁵⁰. The next time the Board would take action was in 1976, in response to an ASH petition to ban cigar and pipe smoking on aircraft. The CAB also invited informal public comment on whether or not and under what circumstances a complete ban of all smoking might be enacted⁵¹. In its explanatory statement, the agency remarked that independent of this rulemaking proceeding, it had received numerous complaints regarding problems such as insufficient numbers of nonsmoking seats, lack of clear boundaries between smoking and

⁴ CAB defined a "formal comment" as a submission of multiple copies of "written data, views or arguments pertaining to the proposed rule making" **48**. 37 Fed Reg 19416. 13 Sept 1972.. Interested members of the general public were also invited to participate through the submission of comments in letter form. The Board referred to these single letter submissions as "letter comments".

nonsmoking areas, and enforcement of the smoking rule. The CAB noted that a number of enforcement proceedings against air carriers not in compliance had resulted.

The Board received formal comments in opposition to further regulations mainly from airlines, the ATA, and tobacco interests. Formal comments in favor of strengthening existing smoking regulations predominated and came from public health advocates and organizations, the AFA, and other interested individuals and organizations⁵². The CAB received over 31,000 informal letters and cards from individual members of the public. About 1450 letters and 4950 postcards supported a ban on cigars and pipes while 23,950 individual comments favored a ban on smoking of all tobacco products. Also submitted to the Board were 132,330 signatures from a tobacco industry funded petition drive advocating an end to smoker discrimination on passenger flights and the establishment of across the aisle segregation of smokers and nonsmokers.

In what would become the first in a series of policy reversals, the CAB voted to direct its staff to draft an order to ban pipe and cigar smoking, to prohibit having more than one smoking area per aircraft compartment, to require airlines to accommodate all nonsmoking passengers, and to prohibit smoking when the ventilation system was not functioning⁵³. The Board also indicated that in response to the volume of general comments received to ban smoking, it would issue a new rulemaking to consider a number of proposals including the prohibition of smoking on aircraft with 30 or fewer seats, flights less than 2 hours, all passenger flights, large aircraft when ventilation systems are not fully functioning, and to require air carriers to provide special seating for persons unusually susceptible to tobacco smoke⁵³. After much deliberation and delay in part due to the replacement of two of its five members, the CAB produced a weakened final rule January 1979 that required carriers to specially segregate rather than ban cigar and pipe smokers and to ensure that “sandwiching” of nonsmoking areas did not unreasonably burden nonsmokers⁵². Likewise, the proposed rulemaking would be modified and comment regarding banning smoking would be limited to flights of 1 hour or less and on aircraft of 30 seats or less⁵⁴.

At the same time the agency was considering the various proposals to amend its in-flight smoking rule, an important shift in its legal authority was taking place^{50,55}. In 1978, Congress passed the Airline Deregulation Act that called for the phasing out of most non-safety-related government regulation of airlines and for the “sunset” of CAB in 1985. As a consequence, many debated whether the agency should continue to regulate airline smoking⁵⁰.

In February 1981, the Board issued a supplemental notice of proposed rulemaking calling for public comment on two opposing alternatives; whether it should ban smoking aboard all commercial aircraft or eliminate its rules entirely and leave the matter to the managerial discretion of the airlines⁵⁶. In its explanatory statement, the CAB acknowledged it had received thousands of comments and letters urging the agency to impose a complete ban and that the reason most often provided was the health hazards of passive smoking. The Board also noted a recent study that concluded that chronic exposure to tobacco smoke could result in injury to the respiratory system of nonsmokers⁵⁷. Although it had never claimed jurisdiction over matters of health, the Board argued that it would be reasonable to find that service that is unhealthy is not “adequate” or “reasonable” and therefore, within CAB’s jurisdiction⁵⁶.

The Board ultimately decided to retain its smoker segregation requirement and concluded that smoking was not equivalent to the types of economic issues that were being deregulated, but instead was an issue “that evoked strong passenger emotions, and possibly had health ramifications for at least some people”⁵⁰. The CAB simultaneously revoked three of the four amendments it had adopted in 1979⁵⁸. The only provision left was modified slightly by stating that an airline would not have to expand its nonsmoking sections for passengers arriving after its’ check-in deadline. ASH responded with a series of lawsuits in the U.S. Court of Appeals for the District of Columbia to reinstate the rescinded regulations and to reconsider some of its earlier rulemaking proposals⁵⁹⁻⁶¹. The CAB finally complied with the Courts’ order and initiated a rulemaking to consider several proposals including a ban of all smoking on aircraft with 30 or 60 seats and on flights of one or two hours in length⁶²⁻⁶⁴.

The Board received about 40 formal comments, 7 of which were from tobacco groups and 14 from airlines or airline associations, and more than 20,000 letters from individuals⁶⁵. For the second time on this issue, the CAB held three days of oral argument in which 42 witnesses, including 10 members of Congress attended. Airlines, unions representing pilots or tobacco workers, pro-tobacco groups, and about seventy percent of the individuals who submitted written testimony opposed the Board’s proposals. The agency would rule against banning smoking on short flights but would reverse this decision numerous times before finally rejecting a ban. The reasons given for the ultimate decision not to take action was that the available scientific evidence did not appear to support a conclusion that the health of flight attendants is harmed by smoking aboard aircraft, a fire danger that might result as a consequence of surreptitious smoking in lavatories, the potential for implementation problems, and possible anti-competitive effects. The Board also rejected the proposal to require special provisions for passengers especially sensitive to smoke. The final rule would ban smoking on small aircraft, ban pipe and cigar smoking, retain the rule requiring fully functioning ventilation systems, and would discourage airlines from sandwiching nonsmokers between two smoking sections⁶⁵. Thus, after debating the smoking issue for more than ten years, the CAB had effected little change in cabin air quality despite increasing pressure by flight attendant, passengers, and health advocates²⁶. Upon the agency’s sunset on January 1985, the authority to regulate smoking became the jurisdiction of the Secretary of the Department of Transportation (DOT)⁶⁶.

In response to the 1986 NAS recommendation that smoking be banned on all commercial flights, six bills were introduced the following year during the 100th Congress to prohibit in-flight smoking. The proposals ranged from a ban of smoking on flights of two hours or less (HR 3018), to all domestic (HR 432, 1078, 3377), and international flights (HR 2040)¹⁵. Legislation submitted in the Senate would ban smoking on all public conveyances⁶⁷. The bills were referred to their respective authorizing committees and the House Aviation Subcommittee held a hearing on the issue later that fall¹⁵.

Meanwhile, in July of 1987, Reps. Richard Durbin (D-IL) and C.W. Bill Young (R-FL) offered an amendment to ban smoking on domestic flights to the 1988 House Transportation Appropriations bill during the subcommittee and full committee mark-ups⁶⁸. In order for the provision to be germane, Durbin added that funding would be denied to airports granting landing rights to carriers that permitted smoking. Though the

provision was defeated in both committees, Durbin approached the Rules Committee with a modified version of the amendment (ban smoking on flights of two hours or less) and was granted permission to offer the provision on the House floor. On July 13, after lengthy debate where various members of Congress recounted their own experiences with smoking related illness, the provision narrowly passed by a vote of 198 to 193⁶⁸.

In the Senate, the chairman of the Appropriations Subcommittee on Transportation, Frank Lautenberg (D-NJ), endorsed the smoking ban. His committee approved a measure banning smoking for three years on flights of two hours or less⁶⁹. On the Senate floor, an amendment prohibiting smoking on flights of 90 minutes or less that would expire in two years unless renewed by Congress was passed by voice vote⁷⁰.

During the House-Senate conference committee on the legislation, lawmakers reached a compromise and adopted a measure that would ban smoking on any U.S. flag carrier on flights of two hours or less for two years effective April 23, 1988⁷¹. Violators would face fines up to 1000 dollars and up to 2000 dollars for tampering with lavatory smoke detectors. Between 80 and 85 percent of all domestic flights were covered by the ban.

On the first day of the 101st Congress, Reps. Durbin and Young introduced legislation (HR 160) that would make permanent the smoking ban on flights of two hours or less⁷². Other airline smoking ban legislation was introduced in both the House and Senate in early 1989 and the bills became the subject of a public hearing by the House Public Works and Transportation Subcommittee on Aviation the following June^{16, 73}. The next month, the House Aviation Subcommittee marked up the legislation introduced by Chairman Oberstar (D-MN). The original bill would ban smoking on all domestic flights but was modified to extend for two years the existing 2-hour prohibition⁷⁴. The legislation was further amended by the full Committee to make the two-hour ban permanent.

In the interim, Rep. Durbin chose once again to use the appropriation process as a vehicle to ban airline smoking. This time, however, the Congressman bypassed both the sub- and full Appropriations Committees and approached the Rules Committee directly to request permission to offer an amendment on the House floor⁷⁵. Although Rules rejected his initial proposal for a ban on all domestic flights, the Committee approved his subsequent appeal to offer a provision to make the two-hour ban permanent. The House adopted the amendment two days later by a vote of 259 to 169 on August 3⁷⁶.

During subcommittee consideration of the Senate transportation appropriations bill, Chairman Lautenberg offered an amendment to ban smoking on all domestic flights⁷⁷. The measure passed by voice vote and was adopted later that day by the full committee by a margin of 18-11. After several days on the Senate floor, lawmakers adopted a cloture petition to end debate on the Lautenberg amendment by nearly a three-to-one margin⁷⁸. The chamber then reversed a parliamentary ruling that had declared the amendment out of order claiming it constituted one committee's invasion of another's jurisdiction⁷⁹. The ban on all domestic flights was subsequently passed by voice vote⁸⁰.

The differences between the House and Senate amendments were resolved mid October. The conference committee members adopted a provision that eliminated smoking on all commercial flights within the continental

United States and on flights to Alaska and Hawaii of six hours or less⁸¹. An estimated twenty-four flights were exempted from the ban⁸². The legislation went into effect February 1990⁷¹.

Results

Twenty year overview of the industry's response to the evolving threat of regulation

A concerted effort on the part of the tobacco industry does not appear to have taken place immediately following the Nader and Banzhaf petitions to the FAA to restrict in-flight smoking. However, internal documents show that the industry monitored the responses to the petitions submitted to the agency even before the FAA's advance notice of proposed rulemaking. An anonymous memorandum from January 1970 entitled "Petitions to Ban or Restrict Smoking on Commercial Aircraft" stated that 150 letters had been received by the FAA in response to the Nader petition; two opposed any restrictions while the remainder, including a letter from Chief Justice Burger, strongly endorsed banning or limiting smoking aboard commercial aircraft⁸³. One reaction to the Nader petition is revealed in a January 1970 correspondence from Philip Morris Vice President (VP) Ross Millhiser to the company's Chief Executive Office (CEO) Joseph Cullman⁸⁴. In the letter, Mr. Millhiser suggests:

"... that we proceed unlike past reactions. Let's support Mr. Nader but ask that smoking seats and/or areas wherein smoking is permitted be provided in planes, buses, etc. We are simply thereby endorsing and upholding the right of each individual citizen to be protected from infringement upon his privacy... We do not want an individual's rights to be infringed upon even by products of our manufacture."⁸⁴

A response to or discussion of the aforementioned proposition to accommodate both smokers and nonsmokers could not be found.

No evidence of direct engagement or organization of the industry in response to the FAA advance notice of proposed rulemaking other than monitoring the contents of the docket and some contact with agency officials was uncovered. The surveillance appears to have been undertaken principally by Covington and Burling, counsel for the TI and Philip Morris⁸⁵⁻⁸⁸. The law firms' memos indicated that the great majority of the comments favored regulations banning or segregating smoking in aircraft (80 to 85 percent)⁸⁸ and that the letters of support came mainly from business and professional men, and individuals and organizations associated with medicine and aviation⁸⁹. Another status report noted that although the closing date for public comments was still almost two weeks off, the FAA already had received the third highest number of comments in its history⁸⁵. We could not find evidence that the tobacco industry had openly submitted comment to the FAA docket. Three Kentucky Congressman and the Kentucky Farm Bureau wrote opposing the regulation of smoking on aircraft⁸⁹. The industry did however, contact the ATA to determine the airline industry's position on segregating smoking and if such actions were likely to be taken voluntarily⁹⁰.

Although still behind the scenes, the individual tobacco companies and the TI responded to the CAB's first rulemaking proceedings to restrict in-flight smoking in 1972 by conducting covert letter-writing campaigns and lobbying air carriers to oppose any smoking restrictions. The tobacco industry did not openly enter the

conflict until 1976 when the CAB proposed to strengthen its smoker segregation rule and requested informal comment on whether smoking should be banned on all flights^{91,92}. In a December 1976 memo to the TI President, an executive from Philip Morris proposed that the industry no longer stand mute. He stated:

“In requesting comments on smoking in airplanes, the CAB has given us a wedge through which we should drive a tank. Up until now, we’ve postured ourselves in the defensive role of supplicant. I suggest we move with a broad stroke to the offensive. Two parallel opportunities occur to me: first that through the Tobacco Institute the industry mount a petition drive at airports among smokers to change the current configuration of smoking/nonsmoking area, second that the Tobacco Institute use this opportunity to gather the names and addresses of some 250 to 500 thousand Americans who object to second class citizenship for smokers. The opportunity is here now”⁹¹.

The TI followed the recommendation and conducted a canvassing drive at airports across the country. The petitions were supplemented with signatures from within the industry and were submitted to the CAB as part of the TI’s written testimony^{93,94}. The TI also lobbied members of Congress and initiated what would be the first of many public relations campaigns on airline smoking⁹².

By the late 1970’s, the tobacco industry felt that the assault on public smoking by “anti-smoking forces” had strengthened⁹⁵. The importance of airline smoking restrictions as a critical component of this success is illustrated in a 1980 memo from Phillip Morris Senior VP James Bowling to TI President Horace Kornegay⁹⁶. In this correspondence, which was generated in response to the 1981 CAB request for comment on either a ban of all in-flight smoking or complete elimination of the smoker segregation rule, Bowling states:

“As you know, I believe that the successful efforts of the anti’s in getting the smoking/no-smoking rule established aboard aircraft was the single most effective thing in their effort to create and promote a social stigma to public smoking. If this presents an opportunity to turn that one around—I think we should do everything possible.”

The TI reacted to the rulemaking by establishing its first “Inter-Staff Working Group on Airline Smoking Regulations”⁹⁷. Its goals were to coordinate efforts among the tobacco industry and its allies in the airline industry, deploy tobacco industry groups at the state level to generate letters, engage in public relations activities aimed at producing favorable news coverage, and encourage Congressional supporters to call for total deregulation⁹⁸⁻¹⁰⁰. With the help of scientific experts and allies in Congress, the industry began to seek access to data, and publicly discredit and refute evidence of harms from SHS put forth as a basis for further restrictions¹⁰⁰.

The strategic plan developed to combat the CAB’s proposed rules to ban smoking on small aircraft and short flights in 1983 was outlined in a memo from TI Executive William Kloepfer to its’ staff stating “Our objective is to maximize public opportunity to urge the Board to maintain the status quo” (emphasis in original)¹⁰¹. The industry knew that the appearance of strong public support for its position was essential and it sought to achieve this objective by intensifying efforts to generate “personal letters” from all potential tobacco-related sources and its airline allies (emphasis in original) (ibid). A second nationwide airport petition drive was undertaken “protesting deprivation of freedom and government intrusion into personal rights”¹⁰². Complaints

from private citizens were filed with CAB claiming that petition gatherers did not always disclose tobacco industry sponsorship or the exact nature of the petition when asked. The petitions, supplemented with more than a quarter of its signatures from within the tobacco industry, were sent to the CAB¹⁰³. The TI published and used for the first time in its public relations efforts and testimony the results from an industry sponsored public opinion survey claiming that the majority of air travelers (approximately 80%) were satisfied with current system of segregating smokers and nonsmokers¹⁰⁴. The industry strove to make its letter count at the CAB match the survey's findings¹⁰⁵.

There was disagreement within the industry regarding the actual economic impact of a ban of smoking on some aircraft. Some argued that cigarette volume would increase rather than decrease because smokers would consume more after deplaning¹⁰⁶. The most significant impact of the passage of such a rule remained according to TI Executive Duhaime "the increase in the public perception that smoking is bad, that it is undesirable and/or unsafe in airplanes and that smokers are fair game and should be restricted" (February 1984 correspondence to Senior VP William Kloepfer)(*ibid*). Though the industry took pride in its ability to ultimately thwart the enactment of a smoking ban by the CAB, the 1984 hearing on the rule was described by President Samuel Chilcote at the Institute's annual meeting as "...the red flag that signaled far greater federal interest in cigarette smoke and the nonsmoker"¹⁰⁷. The degree of opposition and threat the industry encountered is conveyed in a speech by William Kloepfer to the TI Board of Directors where he stated:

"They [the "anti-smokers"] almost made it happen last year on the airlines... To beat them it took the best lobbying, PR, consultant and allies team we've put together so far"¹⁰⁸.

In the interim period between the final CAB rulemaking and the emergence of airline smoking on the agenda of Congress in 1987, the tobacco industry developed a strategy whose main objective was to ensure allegiance of the airline industry¹⁰⁹. Additional goals were to convince airline labor unions, travel agents, frequent flyers as well as Congress and federal regulators of airline passengers' general satisfaction with the current system of segregating smokers and nonsmokers. Public relations efforts were important as well as direct lobbying of personal and professional contacts in the airline industry. After publication of the NAS report on cabin air quality, the tobacco industry realized that support from its' airline allies was waning¹¹⁰. It found a temporary ally in the Air Line Pilots Association (ALPA)¹¹¹.

With the transfer of regulatory authority from CAB to the Secretary of the DOT, the tobacco industry began to closely monitor the policy direction at the agency and in Congress^{109, 112}. Because of the leadership positions of its Congressional allies, the industry was not overly concerned however, of the emergence of the airline smoking issue on the Hill. The industry's confidence is reflected in a July 1987 correspondence from TI Executive Peter Sparber to the Institute's President where he stated:

"Congress repeatedly looks at airline smoking bans but with Senator Ford's [D-KY] chairmanship of the Aviation Safety Subcommittee, action on a ban is certainly not imminent"¹¹⁰.

Public relations efforts especially damage control and preemptive strikes against the results of scientific evidence and public opinion research counter to the industry's claims, intensified in this period. The individual tobacco

companies began to conduct their own research on cabin air quality^{113, 114} and the TI sponsored additional opinion polls^{115, 116}.

During the 100th Congress, the tobacco industry's confidence in its ability to ward off legislation to ban smoking on aircraft was shaken. The industry was taken by surprise when Rep. Durbin succeeded in offering and passing a provision to appropriations legislation on the House floor to ban smoking on flights of two hours or less^{68, 117}. To stop the two-hour ban, the industry worked predominantly through direct one on one lobbying and grassroots mobilizations¹¹⁸. Efforts to demonstrate public support against a ban were augmented with the tobacco industry formed group "Committee for Airline Passengers Rights"¹¹⁹. Up until this time, the industry framed the debate as one of government intrusion into personal rights and the free market, and refuted the existence of scientific evidence of the harms of SHS to the nonsmoker on aircraft. The industry now sought to broaden the issue to overall cabin air quality and pushed hard for the study of other aircraft contaminants. In a November 1987 memo discussing the TI's airline strategy, Susan Stuntz wrote to Peter Sparber stating the industry's goal of "raising the issue of other components of the cabin air, much as we have done with other workplace environments"¹¹¹.

Even before the temporary ban went into effect, the TI developed a twenty-five page "action plan" and an airline smoking program with a budget of over 2.5 million dollars^{117, 120}. The plan had three objectives:

"To ensure that the two-hour ban sunsets as scheduled on April 22, 1990. To persuade congressional and DOT decision makers that the issues to be confronted are cabin air quality and ventilation. To persuade congressional and DOT decision-makers and airlines that smokers expect to be accommodated and that all parties should fight for restoration of a more reasonable system"¹¹⁷.

The industry sought to demonstrate public outrage against the ban, particularly by frequent fliers who smoke. To achieve this aim, the TI coordinated and funded media events and other public relations activities of the supposedly independent Smoker's Rights Alliance^{121, 122}. An additional strategy was to "contain the public debate on environmental tobacco smoke (ETS) within Congress, DOT and the scientific community" with the help of scientific consultants and the results of industry sponsored cabin air quality research¹¹⁷. The tobacco industry knew that it had lost its airline-related allies¹²³ and attacked an air carrier that expanded its smoking ban voluntarily^{124, 125}. A leading Congressional proponent of further restrictions was also threatened¹²⁶.

By 1989, Executives at the TI described airline smoking as the industry's "most persistent and intractable issue"¹²⁷ and one of the industry's "most difficult challenges in Congress"¹²⁸. Despite the engagement of an army of tobacco industry and third-party lobbyists and the help of influential allies in Congress, the industry was unable to stop the adoption of legislation permanently banning smoking on most domestic flights. Even before final passage of the ban, the TI acknowledged defeat by eliminating the airline smoking program from its 1990 budget proposal, withdrawing funding of the SRA, and abandoning efforts to generate favorable public opinion research^{129, 130}.

Emergence and evolution of tobacco industry strategies and tactics: A closer look

Citizen mobilization or “astroturf” lobbying

Letter-writing campaigns

The tobacco industry attempted to hide its involvement in letter-writing campaigns throughout the airline smoking policy process. Letters were generated by the industry’s own employees and related individuals and organizations (e.g., the Tobacco Institute, tobacco companies and associations, wholesalers, distributors, advertisers, law firms, tobacco farmers and unions, subsidiaries)^{100, 131-136}[Woodson, 1987 #461]¹³⁷⁻¹³⁹. Figure 1 shows excerpts of examples of the various covert letter-writing requests found in the tobacco industry’s files from the CAB’s first rulemaking proceeding to establish smoking sections on aircraft in 1972 through the congressional adoption of a smoking ban on flights of two hours or less in 1987. The requests indicated that any association with the tobacco industry not be disclosed. The industry was also aware of the importance that the correspondence be sufficiently different to “avoid the appearance of a tightly organized campaign”¹⁴⁰. By 1987, a tobacco industry front group was created specifically to generate calls and letters against banning smoking on aircraft (see section entitled Smokers’ rights and other front groups).

One tobacco company letter drive was uncovered and reported in the major press during the CAB’s first rulemaking in 1972^{141, 142}. A memo with sample letters from Lorillard attorney Arthur Stevens to the company’s advertising VP, John Bresnahan, requested that ad agency employees be instructed to write letters opposing mandatory smoking sections on aircraft (Figure 1)¹⁴³. The investigative reporters noted that they had no trouble identifying the industry-generated letters submitted to the CAB nor with tracing them to employees of Grey Advertising and the agency D’Arcy, MacManus and Masius^{141, 142}. Charging that Lorillard initiated an extensive corporate program to flood the CAB docket with letters purportedly from individual members of the public, Ralph Nader and the Aviation Consumer Action Project (ACAP) filed a request with the CAB for a rectification of the record by:

“ a) ascertaining through an investigation, the extent to which any parties have engaged in campaigns to distort the record by causing their agents and employees to submit comments without disclosing their source b) direct Lorillard, and any other parties found to have engaged in similar actions to provide copies of all communications to employees, agents, or others requesting or instructing the filing of comments, and a listing of each such comment actually filed in the record c) remove each such comment from the record unless the party responsible for the submission amends it to reflect its true source d) determine whether any person has violated the Board’s Rules of Conduct and, if so, whether any disciplinary action should be taken”¹⁴⁴.

Stevens wrote to the CAB in response to the motion claiming to not have violated the Board’s Rules of Conduct. He argued that “anti-smoking” groups had organized to “influence the outcome of the CAB proceeding” and that it was “important that those with contrary opinions should be alerted and given the opportunity to make their views known to the CAB in their capacities as private citizens”¹⁴⁵. CAB rejected the motion to invalidate the letters stating that both sides had solicited comments on the proposed rule⁴⁹. Despite the

industry's letter-writing efforts, most of the 4500 letters received by the agency were in favor of the proposed rule (no further breakdown provided)(*ibid*).

The tobacco industry continually amplified its efforts to generate comments in response to each attempt to tighten the smoking rules on aircraft. Its early efforts, however, were not considered effective^{146, 147}. Letters in support of the industry's position were particularly few at the completion of the CAB's second rulemaking proceeding in 1979. The Board received approximately 31,000 letters, about 23,950 (77%) of which favored banning smoking on all flights⁵².

Important to the industry's future successes at producing favorable comment was the formation of the Tobacco Action Network (TAN) by the TI in 1977. Coordinated through the Institute's state activities division and consisting predominantly of tobacco-related individuals¹⁴⁸, TAN enrollees were mobilized for the first time to write in opposition to further regulations proposed by the CAB in mid 1979¹⁴⁹. The TAN response to the proceeding was applauded by the industry in one of the organization's monthly newsletters:

“Although letters to the CAB were running as high as 50 to 1 against the smokers at the beginning of the Campaign, the final tally, after the August 20 deadline, showed a ratio of 2 to 1 against further restrictions”¹⁵⁰.

When subsequent rulemakings included formal proposals to ban smoking, the industry knew the importance of generating significant public support against any such prohibitions. TAN became essential to those efforts as illustrated in a February 1981 TI memo entitled “CAB Action Plan” which stated: “State activities should be authorized to employ extraordinary measures, at its discretion, to generate responses from TAN enrollees”¹⁵¹. The industry again succeeded in mobilizing greater support for no further restrictions. By the end of the rulemaking proceedings in 1981, the CAB docket received about 6000 letters in response to proposals to ban smoking on flights of one hour or less and small aircraft¹⁵². Twenty-seven percent favored a ban on smoking while fifty-four percent opposed a ban. The industry did not, however, succeed in generating support for revoking the current system of separating smokers and nonsmokers. Only five percent of the correspondence supported revocation, six percent wrote against revoking the rule, and another six percent wanted the rule to remain unchanged.

By 1983, the TI began an extensive monitoring and reporting program that would provide:

“1. a state-by-state tally of pro-industry position letters received at the CAB already (as well as regular updates to the tally sheet); 2. a word-processed name and address list of all pro industry letter writers for three purposes: an immediate letter requesting additional communication to the CAB, a thank you letter, a continuing list to receive pro-tobacco literature and other material”¹⁵³

The monitoring reports of the letter counts in the docket showed that before the initiation of industry driven letter-writing campaigns, there was overwhelming support of the agency's proposals for further restrictions. One update from July 1983 stated:

“...while at C.A.B., I reviewed some of the 800 pieces received in response to D. 41431. All but one letter was in favor of imposing restrictions on smoking”¹⁵⁴.

Further follow up of the docket contents demonstrated the industry's overwhelming success in generating comments favorable to its' position. A TI correspondence from September of 1983 indicated that the CAB received a total of 3,700 letters, with 1,700 against further restrictions¹⁵⁵. By November, the count was 64% to 36% against the proposed regulations¹⁰⁵. However, the industry was still not satisfied. It sought to make the letter count match the results of its recently released public opinion survey which found that approximately 80% of the public supported the existing arrangement of smoker segregation on aircraft¹⁰⁴(discussed below). A November 1983 memo from TI Senior VP Kloepfer to its staff declared:

“But this is not enough. As we measured public opinion, it's 80-20 against. The docket ratio should be the same and that is our goal” (emphasis in original)¹⁰⁵.

The TI nearly reached its goal. Of the approximately 20,000 individual letters submitted to CAB, 14,399 (72.4%) opposed any further restrictions on smoking while 5,457 (27.4%) favored further restrictions^{65, 156}.

During the February 1984 CAB hearing on its proposed rules, Chairman McKinnon told TI witness and legal counsel Richard Kingham that among the letters in the docket was a “sample letter” which stated, “In preparing your letter, please use plain paper or personal letterhead and a plain envelope. Do not use Philip Morris letterhead or envelopes” (emphasis in original)^{156, 157}. McKinnon added that the request to conceal any relationship with Philip Morris “sort of hurts your viewpoint...I'm just wondering, do you have any idea what percent of letters came from that source?” Kingham responded that he didn't know. He also stated that proponents of further restrictions informed people whom they thought would have an interest in this issue and that the tobacco industry's efforts were no different.

After the release of the NAS report on aircraft cabin air quality, the DOT opened a special docket to receive comment on the report's recommendation that smoking be banned on all passenger flights. The agency received approximately 2,330 comments in favor of the recommendation as well as a petition with more than 6,100 names urging the DOT to ban smoking. Less than 300 of the letters opposed a ban¹⁵. No evidence of tobacco industry involvement to generate comment to this docket was found.

The industry continued its mobilization efforts and boasted of success in generating letters, mailgrams, and phone calls to key legislators, the DOT, and airline executives when the airline smoking issue emerged in Congress^{117, 137-139, 158-160}. Congressmen were aware, however, that the flood of communications were generated by the tobacco lobby^{15, 161}. No data were available in the industry's file or in the public records to allow for a comparison with communications submitted in favor of banning smoking on aircraft.

Petition drives

To offset the abundance of letters to the CAB from proponents of smoking restrictions on aircraft, the tobacco industry developed a plan to obtain support from airline travelers for equal treatment of smokers and nonsmokers¹⁴⁷. To achieve this goal, the TI and Philip Morris hired Donnelley Marketing to conduct a nationwide airport petition drive in response to the CAB's first attempt to strengthen its smoking rule in 1976^{91, 162}. The petition read:

“To the U.S. Civil Aeronautics Board: The undersigned believe that each smoking and nonsmoking airline passenger deserves equal comfort, service, freedom from engine noise and access to exits, and that this can best be achieved by separately seating smokers and nonsmokers across the aisles from each other.”¹⁶³

In a December 1976 memo to the TI President, Philip Morris Director of Public Affairs, Edward Grefe described the petition as having additional advantages:

“A. The immediate and dramatic PR value of presenting the CAB, the Congress, and others with a half million names of individuals seeking redress;

B: the immediate creation of an organization of smokers opposed to further government encroachment; and

C. the dramatic illustration that this industry will not stand mute”⁹¹.

Although the industry had initially hoped to mount the petition drive in 100 airports across the country and gather several hundred thousand signatures^{91, 164}, it succeeded in gaining access to about fifty of the nations largest airports¹⁶⁵. Travelers at several smaller airports in tobacco states were also canvassed¹⁶². A report on the petition drive indicated that obtaining permission was problematic at almost half of the top fifty-seven airports in the United States¹⁶⁶. Petition gatherers were denied access at ten major airports and allowed only partial or restricted access to others^{165, 166}. Eight major airlines refused to cooperate on a national basis¹⁶⁵ and one major airline stated that it would encourage others to resist the industry’s efforts¹⁶². The opposition was presumably based on the desire to keep the present seating arrangements for the separation of smokers and nonsmokers¹⁶⁷. At a cost of approximately 190,000 dollars¹⁶², about 133,000 signatures were obtained and submitted by the TI along with its supplemental comments to the CAB docket in late January 1977⁹⁴.

Despite the difficulties encountered, the industry boasted of the success of its petition drive to demonstrate wide public support of equal accommodations for smokers and nonsmokers aboard the nation’s aircraft^{165, 1685}. At the TI press conference announcing the canvassing results, President Kornegay said that “he believes that what The Tobacco Institute has undertaken is without precedent in terms of public and business response to government regulation”¹⁶⁸. He also stated that:

“...this dramatic response of airline passengers to the petition drive belies the suggestion...that a substantial proportion of ordinary airline passengers support further restriction on smoking...The views of that minority, however sincere, should not outweigh the legitimate rights and interests of the great number of airline passengers who enjoy or do not object to smoking”¹⁶⁸.

The TI President did not reveal that the petitions were supplemented with signatures from within the tobacco industry and its subsidiaries^{93, 170} and that he had stated in an internal memo that it was essential that any petitions circulated amongst employees be delivered to the CAB within a time frame that would “insure that the

⁵ Attorney Stan Temko of Covington and Burling advised the TI against petitioning the CAB to require that the segregation of smokers and nonsmokers be longitudinal rather than fore to aft since air carriers would oppose any changes to their present seating arrangements **169**. Dowdell JS. The Tobacco Institute Annual Meeting, February 24-26. 28 Feb 1977. Bates No. 500075757/500075762. Available at: <http://legacy.library.ucsf.edu/tid/bzo61d00>. Accessed 30 Nov 2004..

integrity of the signatures obtained at the airports is maintained” (emphasis in original)¹⁷⁰. By limiting the time in which signatures were collected, the industry was able to present its petitions as being signed exclusively by airline passengers.

The CAB docket contained evidence that some signatures may have been falsified. Rep. Charles Grassley (R-IA) forwarded to the agency a letter written April 1977 from a constituent complaining that his wife’s signature had been added without her consent. The correspondence stated:

“Dear Mrs. Grassley:

Hate to bother you with things like this. But it kinda burns me to have this kind of thing done.

The enclosed was part of the front page of a Tobacco magazine mailed to my wife. But at no time did she ever sign a petition to give smokers equal seating on aircraft. In fact we would just as soon they didn’t smoke at all on aircraft. We have had times when people sitting in the no smoking area have smoked like a chimney and nothing was done about it either. We didn’t know the address of the CAB or we would have sent this directly to them. Will you please pass it on? Sincerely, Lawrence Aves”¹⁷¹

The CAB’s Director of Community and Congressional Relations wrote Rep. Grassley thanking him for having brought their attention to the matter and stated “you may be assured that the Board’s decision in the rulemaking will not turn on a count of numbers of persons supporting particular positions”¹⁷².

The TI conducted a second nationwide airport petition drive in 1983 in response to the CAB’s re-issuance of various proposals including rules to ban smoking on small aircraft and short flights^{101, 102}. Petitions were to be solicited in the major airports in all 50 states¹⁰². Instead, canvassing took place at twenty-nine airports across the country over a two and a half week period¹⁰³. The TI filed the more than 180,000 signatures along with its reply comments to the CAB¹⁷³ and again did not disclose that the petitions had also been distributed among tobacco industry employees¹⁷⁴⁻¹⁷⁶. One industry document revealed that more than 50,000 signatures were collected by the Philip Morris U.S.A. Field Sales force¹⁰³.

The CAB received several letters written by private citizens alerting them to the actions of some of the petition-gathers at airports. A May 1983 correspondence from an individual in Alabama stated:

“I asked the person making the canvass about the organization supporting it, but I couldn’t not find out the information. The worker did say that the pay for doing the work was \$50.00 per day and that it was under the supervision of a local firm for which other commercial activities had been performed by the person... I realize that you must be under great pressure to do what is in line with the traditional forms of accommodation with tobacco interests. Nevertheless, I hope you will have the good sense and the courage to do what proper concern for human welfare and airlines safety indicate.”¹⁷⁷

Another letter (November 1983) to CAB described an encounter with four women at the Nashville airport who were stopping and asking travelers to “sign a petition to keep nonsmoking sections on flights”¹⁷⁸. The author continued:

“As I started to sign, the woman held the clipboard in such a way that the wording of the petition was concealed. I ask her to remove her hand to enable the wording to be seen. I was surprised it read

something like this “we oppose any government regulations that would ban smoking on flights under 2 hours duration, ban smoking on small aircraft of 30 or less seats, permit smoking even though a passenger may complain of ‘physical illness’ caused by drifting smoke”. I did not sign the petition, but unfortunately I saw many people sign on the basis of the women’s misleading statement, without asking to see the wording. I ask that you take into consideration the deception used to obtain the signatures, if petitions are presented before the Board.” (ibid)

We found no evidence in the industry’s files or in the public record of any response or actions taken regarding the aforementioned complaints.

Smokers rights and other front groups⁶

Committee for airline passengers rights (CAPR)

In response to Senate passage of an amendment banning smoking on flights of 90 minutes or less in late 1987, the tobacco industry formed the “Committee for Airline Passengers’ Rights”, an organization “made up of smokers and tobacco industry personnel”^{117, 119, 179, 180}. The group was first developed and deployed in New Jersey with the intention of affecting airline smoking ban proponent Senator Frank Lautenberg^{181, 182}. Expansion of the organization to other states was to be accomplished by Institute field staff and other tobacco industry affiliates as needed¹¹⁹. David Goldfarb, Executive Director of the Tobacco Distributors Association of New Jersey was appointed as the Committee’s chairman¹⁸².

A stated goal of the organization was to “urge Congress to focus on ‘real air travel concerns such as safety issues and schedules’ and to resist efforts to make the ban permanent when the temporary ban sunsets in two years”¹⁸³. The CAPR’s main function was to mobilize individuals to write and express their views to Senator Lautenberg so that he “will know there is a strong group of New Jerseyans who disagree with his views on tobacco issues” (Figure 1)¹⁸¹. Although letter-writing requests were also circulated within the tobacco industry¹⁸⁴, in this covert campaign, private citizens in receipt of the groups’ “Fact Sheets” were unaware that there was no affiliation with an actual airline passengers organization¹⁸¹.

The TI did not follow-up on the effectiveness of the CAPR in terms of its letter generating capacity¹⁸⁵ and there was no indication in the internal files of its deployment in other states. There was also no evidence of the group being exposed as having been created by the tobacco industry solely to stop the airline smoking bans.

Smokers’ rights alliance (SRA)

The general consensus among the TI’s airline working group in early 1988 was that mobilization of smokers was needed to exert pressure on policymakers and airlines to ensure sunset of the airline smoking ban on

⁶ The Center for Media and Democracy defines a front group as “an organization that purports to represent one agenda while in reality it serves some other party or interest whose sponsorship is hidden or rarely mentioned” (http://www.disinfopedia.org/wiki.phtml?title=Front_groups&printable=yes)

flights of two hours or less in 1990^{185, 186}. A March 1988 memo summarizing the proposed airline strategy from the group's leader, John Lyons to TI Executive Peter Sparber stated:

“Smokers are an unorganized political constituency, but unless there is an outcry among smokers, there will be no reason, no context, to repeal the ban or allow it to sunset”¹⁸⁶.

To achieve this aim, the TI coordinated, organized, publicized and funded activities of Dave Brenton and the Smokers' Rights Alliance (SRA)^{117, 187}. Based in Arizona¹⁸⁸ and made up of about 700 members¹⁸⁹, the group claimed to operate on membership dues and private donations including “some in-kind assistance” from the TI¹⁹⁰. The formal business relationship with the industry is outlined in a March 1988 correspondence from TI Senior VP William Kloepfer to SRA President Dave Brenton. The agreement indicated that Mr. Brenton would be available on a full-time basis for activities pertaining to the airline smoking issue until at least July 1988 and would receive \$5000 per month compensation¹⁸⁷. In addition, the TI would provide necessary informational materials and fund various public relations activities budgeted at about \$80,000 (see Public Relations Campaigns)¹⁹¹. Included among the SRA's activities were demonstrations at various airports as part of a nationwide media tour. Picketing results at the staged demonstrations were described as poor and consisted of tobacco industry personnel in the various locales rather than outraged smokers^{189, 191, 192}.

The relationship between the tobacco industry and the SRA was exposed in the Congressional Record and in the print media in 1989^{190, 193}. In an article published by the Christian Science Monitor on August 16, Congressman Richard Durbin wrote:

“When the airline smoking ban first squeaked through Congress two years ago, the national coalition of local health groups provided crucial political support. The Tobacco Industry, stung by the loss, is spending millions of dollars to create its own version of that weapon in the form of a smokers' rights ‘movement’. During a recent congressional hearing into the airline smoking ban, its Smokers' Rights Alliance dutifully submitted a statement demanding a return to the smoky skies”¹⁹⁰.

Because the relationship between the TI and the SRA was limited to the airline smoking issue, funding of the group was suspended with the elimination of the Institute's airline smoking program by the TI in late 1989^{129, 194, 195}.

Washington Lobbying

Mechanisms-Direct and Indirect

Direct

As indicated previously, the tobacco industry did not openly engage in the airline smoking policy process until the CAB sought to strengthen its' airline smoking rule for the first time in 1976⁹². Internal documents and public records show that the tobacco industry acted predominantly through the TI to submit written commentary, testify at hearings, and contact agency officials and members of Congress. Direct lobbying of policymakers in Washington became more important as the airline smoking issue moved from the regulatory setting to the Congress in 1987^{118, 159}. By 1989, the TI and individual tobacco companies mobilized a virtual army of lobbyists

including those already working for the industry in Washington, TI state activities lobbyists, lobbying firms, public relations associates, tobacco subsidiaries, tobacco-related organizations, and allies in the farm industry^{196-200 201}. The types of lobbying activities and claims making are described in the following sections.

Indirect via third party allies

In this section we present findings regarding the role of the tobacco industry's third party allies in the fight against airline smoking restriction. These allies included sectors of the airline industry, scientific and other research consultants, executive agency officials, and friends in Congress.

Air Transport Association (ATA) and individual air carriers

Industry documents indicate that the TI and individual tobacco companies first lobbied the airline industry to oppose smoking restrictions during the 1972 CAB rulemaking proceeding²⁰². One internal memo revealed that the ATA did not originally plan to resist the proposal to segregate smokers and suggests the importance of the tobacco industry's contacts within the airline industry²⁰³. This October 1972 correspondence from Philip Morris VP Ross Millhiser to the company's CEO states:

“As you know, at the meeting last week at the Tobacco Institute, it was stated that the ATA and therefore the airlines would not oppose the proposed CAB rule... Since that time, Mr. James E. Landry, Senior VP and General Counsel of the ATA – in spite of being the younger brother of John T. Landry [a VP at Philip Morris], convened with all the member airlines... with the result that all carriers, with the exception of one non-domestic carrier, have agreed to participate in a draft of opposition to the CAB proposal. The one exception will not support the CAB proposal but will merely refrain from the opposition of the proposal”²⁰³.

The ATA submitted formal comment to the CAB resisting the rule a month later²⁰⁴.

The tobacco industry continued to foster its contacts and sought to maintain an alliance with the airline industry throughout most of the policy process^{92, 99, 109, 112, 117, 205}. The tobacco industry's relationship with the airline industry became more explicit in response to the CAB request for public comment on whether it should ban smoking on airplanes entirely or eliminate all regulation of in-flight smoking in 1981. As part of the TI's strategic plan to overturn the smoking rule, tobacco industry attorneys coordinated with the ATA to prepare testimony for submission to the agency^{99, 100, 206}. A February 1981 correspondence from counsel at Brown and Williamson to General Counsel at the TI described the importance of the alliance:

“The principal purpose of industry liaison with the ATA, airlines, and others, is to persuade them to present our arguments for us. This is a step beyond the obvious meaning of ‘coordination’ as mentioned in your action plan; we want them not only to ride in the same direction as we but also to carry our lance”¹⁵¹.

The TI also encouraged the airline association to produce scientific testimony, and if possible present a scientific witness at the CAB hearing ¹⁰⁰. A March 1981 progress report on implementation of the “CAB Action Plan” showed that the TI was only partially successful in its coordination efforts:

“Specifically, ATA Counsel reported that there was unanimity among the airlines for a revocation of Part 252 of CAB rules and on a strong opposition to any ban on smoking (some airlines indicated a determination to file suit should such a ban become a CAB rule); the ATA will argue a narrow line that it acts in the interests of all passengers, the CAB proposals are inconsistent with deregulation, CAB lacks statutory authority in this area and that a ban would be impractical; ATA will not...delve deeply into the smoking and health area in either the medical or engineering areas, but ATA will note that that medical and scientific material is beyond the expertise of CAB” ²⁰⁶.

The report goes on to state:

“The working group agreed that further dealings with the ATA in the matter of science should be approached cautiously and without undue pressure. ATA might provide scientific evidence to be presented by some other source.”

The ATA did not produce either written or oral testimony from a scientific or engineering expert ^{207 208}.

The TI coordinated with the ATA and individual airlines to produce oral and written testimony again in 1983 in response to the CAB proposals to ban smoking on short flights and small aircraft ²⁰⁹. After the CAB sunset in 1985 and transfer of authority to regulate smoking on aircraft to the DOT, the tobacco industry developed a strategy directed at maintaining the allegiance of the airline industry. The plan stated as its main objectives:

“...reinforce airline industry awareness of: the users of tobacco products as a major air travel market segment, legislative and other threats of common concern to the tobacco and airline industries, the value of the tobacco industry as an ally, and the tobacco industry’s opposition to further restrictions of smoking aboard commercial aircraft” ¹⁰⁹.

Public relations efforts were described as key as well as the establishment and maintenance of personal and professional contacts in the airline industry.

After the release of the NAS report on cabin air quality in August 1986, the tobacco industry first noticed withdrawal of the airline industry’s support ^{111, 112}. A February 1987 TI correspondence between two Institute executives most succinctly described the retreat:

“Although the DoT is attempting to keep hands off the smoking issue if at all possible, the airlines are not as quiet. You will recall that we began seeing signs of a pullback from airlines’ historical support of separate sections last year when word came that the NAS may be focusing on broader ventilation questions in addition to smoking.

Now we have learned that individual airlines are talking privately with staffers on Congressional aviation and transportation committees, suggesting that, although they will never openly support legislation to ban smoking, Congress would be doing them a favor by banning... Other airlines, including

traditional allies such as USAir, Delta and Piedmont are not active, but their silence on the issue sends a message nevertheless.

The airlines claim three reasons for the pullback: First, fewer and fewer passengers are asking for seats in the smoking sections, making for an administrative nightmare for ground and flight personnel. Second, increased costs from maintaining the smoking section. Third, and perhaps most important to us, continued worry about the entire ventilation question”¹¹².

The memo goes on to delineate the TI’s plan to persuade the airline industry to recant:

“1. We are recontacting individual airlines, reminding them that any change from their past vocal opposition to a ban is unacceptable to the industry. Our goal is to identify some carriers who will continue to actively oppose a smoking ban.

2. The airline industry has admitted privately to concern about the roles Commerce Committee Chairman Hollings (a supporter of reregulation) and Aviation Subcommittee Chairman Ford will play in the current Congress. We will brief Ford on the issue and seek his cooperation in arranging a private meeting with tobacco and airline industry representatives to discuss issues of concern to both groups.”

No evidence of any actions taken by the aforementioned Congress members was found. Nor did the industry appear to have been successful in its efforts to lobby the airline industry.

The ATA and individual carriers did not appear at the Congressional hearings on the issue in 1987 or in 1989. Both years, the association submitted written testimony on behalf of the airline industry stating that it supported the status quo but that it would not oppose more restrictive legislation. Piedmont Airlines submitted a statement for the hearing record in 1987 supporting the tobacco industry’s position to maintain the status quo and that further study of cabin air quality was necessary before any further restrictions were adopted¹⁵. At the 1989 hearing, Northwest was the only air carrier to submit testimony. The airline filed a statement favoring extending the ban to all domestic flight and claimed that it’s smoke-free policy on domestic flights had been based on passenger and employee preference and that its implementation had been a success. They noted that since the adoption of the policy, passenger traffic had increased by 7.3%¹⁶.

Other airline related organizations

In 1987, the tobacco industry found an ally in the Air Line Pilots Association (ALPA)^{110, 210, 211} even though the majority of the association’s members were believed to support a smoking ban^{112, 212}. In past regulatory proceedings, the ALPA expressed opposition to a prohibition arguing that it would result in surreptitious smoking and consequently create a fire hazard^{213, 214}. Rep. Richard Durbin claimed that the reason for the alliance was that the association was wary of offending Senator Wendell Ford (D-KY), Chair of the Aviation subcommittee²¹⁵. Evidence from the tobacco industry’s files supports this assertion. A March 1987 memorandum by the TI’s Susan Stuntz to Peter Sparber stated that Senator Ford was to be made “aware of the tremendous help ALPA has been to us on the smoking issue”²¹¹. Later in the correspondence, Stuntz wrote that:

“Paul [Halasay of ALPA] continues to remind us that he wants Wendell Ford to know of his assistance – not only for the labor protection provision under consideration in the Commerce Committee, but also because the committee is considering a drug testing bill for pilots...”²¹¹.

Also described in this letter was an order from Halasay to pull an article from the ALPA’s monthly magazine that suggested that SHS results in vision, concentration and fatigue in pilots²¹¹. The memo reveals that the ALPA worked with the TI to develop a survey instrument for a public opinion poll on airline smoking at a cost of approximately \$35,000²¹¹. The results from the survey were used in the lobbying efforts of both the TI and the ALPA to support its assertion that there was a lack of public support for a ban of smoking on passenger aircraft^{15, 16, 216}. The TI did not disclose that the groups had worked together to conduct the poll^{15, 16}.

In other efforts to assist the TI, the ALPA agreed to meet in April 1987 with flight attendant unions in an effort to persuade them to take a “neutral position” on the airline smoking issue²¹⁰. Neither the TI nor the ALPA succeeded in forging an alliance with flight attendant groups^{74, 112}. A February 1987 TI memorandum between two Institute executives described the flight attendant unions as “hostile” towards the tobacco industry¹¹². In the July 1989 progress report on the Institute’s airline smoking program, project leader John Lyons admitted that the tactic to forge an alliance with flight attendants was infeasible. He further stated that “all major flight attendant groups oppose us on airline smoking and are suspicious of our motives with respect to cabin air quality”⁷⁴. The report also acknowledged that no further action had been taken to work with other airline related groups such as Aviation Safety and Health Association (ASHA) and the Airline Passengers Association. The former group, however, did testify at both the 1987 and 1989 Congressional hearings on airline smoking urging the subcommittee to address cabin air quality issues other than SHS^{15, 217, 218}.

The alliance between the ALPA and the TI appears to have lasted only through the 1987 Congressional proceedings on airline smoking. ALPA lobbyists presented tobacco industry arguments in opposition to banning smoking to House members of both the full and subcommittee on transportation appropriations^{219, 220}. The ALPA did not appear, however, at the October 1987 Congressional hearing on airline smoking¹⁵. We could find no evidence of further collaborative efforts from either the tobacco industry’s internal files or the public record. In fact, a February 1989 memorandum from Amy Millman to executives at Philip Morris stated “we still don’t have any allies”¹²³.

Industry Consultants: Scientific Experts

The tobacco industry enlisted the help of scientific consultants in the fight against airline smoking restrictions beginning with the industry’s own open participation in the policy process in 1976. Scientific experts already working with the industry to refute evidence of the harms of SHS submitted written testimony to the agency on its proposed rules^{157, 207, 209, 221, 222}. It was not until the 1984 CAB hearing that tobacco industry consultants began to present oral testimony along with findings of TI sponsored research²²³. In the mid 1980’s scientific experts also took part in the TI’s public relations efforts on the airline smoking issue in response to the NAS recommendations to ban smoking on all passenger flights (see section entitled Public Relation Campaigns).

When the airline smoking issue reached Congress, industry experts testified at hearings^{15, 16, 224} and gave presentations at private gatherings with regulatory and congressional lawmakers^{216, 225}. The industry also paid its experts to critique the existing literature on cabin air quality^{226, 227}. The two reviews published within the time period of our case study concluded that levels of SHS constituents do not support claims of adverse effects to exposed passengers and crew. Holcomb postulated that complaints of discomfort are wrongly attributed to SHS and that other pollutants or environmental conditions aboard aircraft could be responsible²²⁶. Crawford stated that high ventilation rates on aircraft effectively control all pollutants²²⁷.

The tobacco industry, however, was not satisfied with its' pool of expert witnesses. In comments made at the TI's annual meeting in late 1984, Chilcote stated:

“One of our greatest weaknesses is our lack of qualified medical researchers to help us refute the anti-smokers with legislative testimony, public appearances and articles. Covington & Burling is actively attempting to identify and develop such experts”²⁰⁹.

The industry complained of similar difficulties in later years when it sought an expert on aircraft ventilation^{217, 218, 228}. In a March 1989 TI correspondence to the law firm Paul, Hastings, Janofsky and Walker, John Lyons stated:

“Also, I would like you... to contact the Scientist's Institute for Public Information and find out whether they can put us in touch with a ventilation expert specializing in aircraft systems. This group is a clearinghouse/referral service and may be able to find a true expert. This is something of a shot in the dark, but other efforts have not succeeded. And I have no choice but to run down the lead”²²⁸.

Unable to find an expert in the field²¹⁸, the TI utilized its' ventilation expert Gray Robertson of ACVA Atlantic who was described by John Lyons in another March 1989 correspondence as not having “any history on this issue”²²⁹. One month later, a TI document entitled “Talking Points on Smoking Aboard Airlines“ stated:

“We have changed Gray's media messages to highlight airliners as one of the filthiest indoor environments and to emphasize ventilation as the only workable solution to cabin air quality problems. Gray will, as appropriate, brief members of the subcommittee and subcommittee staff on these issues. In addition, we continue to search for a true aircraft ventilation expert—an engineer who comes out of the aviation industry—to speak out on these issues. This task is proving difficult, so at the same time we are getting our existing consultants up to speed on the literature and arguments relating to design characteristics, operation practices and maintenance of airliner ventilation systems”²¹⁷.

The tobacco industry did not succeed in finding an expert in aircraft ventilation before passage of legislation to extend the existing smoking ban to most domestic flights.

Federal Regulatory Agencies and the Executive Branch

We identified few tobacco industry documents concerning lobbying and other contact with the CAB and the FAA during the airline smoking policy process. We did find however, evidence that one CAB Board member, George Dalley, became a consultant to Corporate Public Affairs at Philip Morris two years after his appointment with the agency^{230, 231}. An additional memo indicated that TI executive William Kloepfer had been an employee

at the CAB prior to 1970²³². Other records showed that the tobacco industry had friends at the FAA dating back to the early 1970's^{86, 233}. A January 1972 memo from President Horace Kornegay to Chief Executives and General Counsel at the TI stated that the industry had received on a confidential basis prior to public release the abstract with findings from the FAA/NIOSH study of tobacco smoke on aircraft²³³.

There were many more documents in the industry's files describing contacts and lobbying at the DOT when airline smoking came under that agency's jurisdiction. One of the earliest industry records we uncovered discussed the consumer division at DOT and a newly installed computerized tracking system for recording complaints²³⁴. This April 1985 TI correspondence revealed that over a three-month period telephone complaints regarding smoking increased 31 percent. The author, indicated only by the initials SMS, added that the agency had not yet finalized the system and that a tobacco industry lobbyist, Judy Hope, with extensive connections to the agency and the aviation industry, could be of assistance. A memo dated seven months later from Samuel Chilcote to members of the TI Executive Committee revealed that the industry had been successful in its efforts to influence the recording system at the DOT²³⁵. The memo stated:

“On April 1, a new airline consumer complaint system was implemented by DOT. Due to the design of the system, we anticipated a rise in smoking-related complaints. Therefore, we encouraged the DOT to avoid comparisons with past data and to define ‘smoking’ complaints so that smokers’ dissatisfaction would be mixed with nonsmokers’ complaints. Our recommendations have been accepted although we continue to press for a more neutral definition of ‘smoking’ complaints”²³⁵.

The tobacco industry continued to find an ally in the DOT through the remainder of the airline smoking policy process^{210, 236}. A 1988 TI document entitled “Airline Plan Talking Points” described its relationship to the agency and its success in convincing the department to conduct and expand its’ proposed aircraft monitoring study to all aspects of cabin air quality:

“The Department of Transportation has been as helpful as possible to the tobacco industry, especially by rejecting last year the National Academy of Sciences’ recommendation for a total smoking ban. DOT will commission a comprehensive empirical study of cabin air quality, including ETS... We continue to work with DOT on the study and related issues.”²³⁶

This degree of access to the agency seemed particularly apparent during the tenure of Elizabeth Dole as the Secretary of Department of Transportation though we could not find documents directly linking her or any other individual by name to the tobacco industry.

Friends in Congress

Industry documents, public records, and journalist accounts illustrate the types of lobbying and other support offered by the tobacco industry's Congressional allies throughout much of the airline smoking policy process^{69, 237-243} (Elving, Congressional Quarterly, Inc. 1987)^{77, 244, 245 246-250}. The most active allies included Senators' Earnest Hollings (D-SC), Wendell Ford (D-KY), and Jessie Helms (R-NC) and Congressmen Walter Jones (D-NC), and Tim Valentine (D-NC). The phenomenon of “revolving doors” between tobacco industry

lobbyists and legislators was also apparent. For example, several TI Presidents and other executives were themselves former members of Congress including Earle C. Clements of Kentucky and Horace R. Kornegay of North Carolina²³². Moreover, the tobacco industry found itself in a privileged position with respect to the presence of friends in key leadership positions^{251,252}. The committees overseeing airline smoking consisted of the Aviation subcommittees of both chambers of Congress, and their full committees: the House Public Works and Transportation Committee, and the Senate Commerce, Science, and Transportation Committee. When the airline smoking issue made the Congressional agenda in 1987, Ford (D-KY) chaired the Senate Aviation subcommittee and Hollings (D-SC) chaired the Full Committee (Commerce, Science, and Transportation). Both Senators were long time allies of the tobacco industry^{251,253}.

Assistance from friends in Congress took many forms including writing letters to policymakers supporting the industry's position, testifying at regulatory and legislative hearings, holding or otherwise influencing the direction of Congressional hearings, submitting statements and industry talking points to the Congressional record, attempting to obtain data and discredit research evidence put forth as a basis for further restrictions, and influencing the direction of federally funded research. Policymakers also introduced legislation to rollback or thwart the adoption of stronger smoking restrictions on aircraft though these attempts were ultimately unsuccessful.

Figure 2 displays a document from the tobacco industry's files with excerpts from letters written by Congressional allies to officials at the CAB during its first attempt to strengthen its aircraft smoking regulations²⁵⁴. Note the similarity of their content when compared to tobacco industry statements made during the same time period, especially claims that the present rule accommodates all and further restrictions are not supported by the majority of air passengers (see section below entitled "Lobbying Content: framing and reframing the debate"). Correspondence in future regulatory and legislative proceedings from both tobacco and non-tobacco state policymakers continued to reiterate the industry's viewpoint and often included results from TI sponsored studies particularly its public opinion polls^{249,255-260}. The industry's files and the public record also provide evidence that some letters were drafted directly by the TI for both tobacco and non-tobacco state senators^{261,262}. Members of Congress coordinated with the tobacco industry to appear at regulatory and legislative hearings^{223,263-265} and delivered speeches, submitted industry talking points, or asked questions prepared by the industry during hearings, committee meetings, and floor debates^{79,244,266-268}. Figure 3 illustrates a tobacco industry fact sheet entitled "Points To Remember About Smoking Aboard Aircraft" submitted to the Congressional Record by Sen. Helms (R-NC) during the October 1987 Senate floor debate on banning smoking on short flights^{244,266}.

The most intriguing written testimony uncovered was that provided by Rep. Walter Jones (D-NC), Chairman of the Tobacco Subcommittee of the House Committee on Agriculture to the Chairman of the CAB in 1978^{237,269,270}. In this correspondence (Figure 4), the Congressman cited as evidence against further restricting smoking on aircraft the transcript of a hearing held a week earlier by his Subcommittee regarding the health effects of SHS. He summarized expert testimony that had concluded that exposure to SHS at levels likely to be encountered on aircraft is not harmful. The Congressman indicated that several witnesses specifically criticized

the most recent evidence demonstrating cardiovascular effects of SHS (Aronow et al., 1987)²⁷¹ as methodologically flawed and that the study should not be relied upon as a basis for further rulemaking. He added that experts in psychology and sociology had found that regulating public smoking is not of concern to most Americans. Internal documents and news accounts revealed that not only had the tobacco industry encouraged the subcommittee hearing on SHS⁹⁵ but assisted in the selection of expert witnesses^{272,273}. Notice of the hearing was not made public until 6 days prior and public health officials, government researchers, representatives of health organizations, and public health advocacy groups were not invited to testify²⁷⁴. The Tobacco subcommittee itself was comprised of seven tobacco state congressmen out of a total of eight members. Many of those attending the hearing were lobbyists from the TI or representatives of the tobacco industry²⁷³. A memo circulated among RJ Reynolds executives dated August 29, 1978 indicated that the TI had “suggested that as many pro-industry people as possible attend the hearing to lend support...since the event could be one of the more significant pro-industry efforts on the Hill in many years”²⁷⁵.

In his opening remarks, Chairman Jones stated “We have scheduled this hearing because of concern about an issue which is receiving a great deal of attention and that is the effort to restrict smoking in public facilities...the time has come to put some information from real medical and scientific experts on the record here to help us in our own final judgment”²³⁷. Over a three-hour period, the Subcommittee heard testimony refuting a link between SHS and harms to the nonsmoker and claims that any perceived health effects were emotionally induced physiological responses. “Antismokers” were described as hostile and said to represent a vocal minority seeking to infringe on the rights of smokers. One witness presented results of a survey commissioned by the tobacco industry investigating annoyances and irritations in everyday life. The study concluded that only two percent of the responses related to smoking. In his closing statement, Rep. Jones commented:

“I hope that what we have done here today will provide an obviously much needed better balance of public awareness of these opinions that have been expressed. It strikes me that a good deal of what we have heard constitutes unassailable, scientific facts, and if we are ever going to have a consensus on this matter, it should be and must be scientific facts and not emotion that lead us to it.”

Table 4 illustrates quotations from each of the witnesses at the hearing. Notice the resemblance between many of these statements and the arguments put forth by the tobacco industry and its scientific consultants at various proceedings on airline smoking (see section entitled “Lobbying content: framing and reframing the debate” and Table 5).

After the hearing’s adjournment, TI President Kornegay announced to the press that “Congress has finally heard what so many of us have been convinced of for a long time – that tobacco smoke has not been shown to cause disease in people who do not smoke. At long last...the American people have heard the facts”²⁷³. The TI published a summary of the hearing’s testimony²⁷⁶ and several hundred thousand copies were disseminated during the first half of 1979 by individual tobacco companies and the TI in all its operations including mobilization of the TAN²⁷⁷. The media coverage of the event, however, was described as disappointing by the

tobacco industry (ibid). The hearing was mocked even by traditionally tobacco friendly news organizations²⁷³.²⁷⁷ An editorial in the Louisville Times stated:

“There was as much suspense over Thursday’s hearing... as there usually is over the outcome of a dissident’s trial in Moscow.... [Jones] began by thanking the chief lobbyist for the tobacco industry for his help in selecting witnesses.... It was, in short, a farce...”²⁷⁷

Despite the unfavorable press, the tobacco industry was pleased with the hearing’s outcome. An internal memo dated September 14, 1978 written by Kendrick Wells and Wilson Wyatt and circulated among executives at Brown and Williamson described the significance of the proceeding as well as the importance of supporting monetarily allies such as Rep. Jones.

“The hearing was important because it provided an official forum for this qualified, well-researched testimony during a time when the air is filled with emotional attacks on cigarette smoking. The tobacco industry can point to this hearing and use the testimony as a strong defense against the industry’s adversaries”

It is important to point out that many hearings in Washington do not give the pro-tobacco voices a fair opportunity to be heard. Even qualified scientists with national and international recognition find difficulties in presenting positive information on tobacco in the present Washington environment.

Congressman Jones performed an important service for the industry in setting up the hearing and arranging for other tobacco state congressmen to appear. His actions illustrate why friends of tobacco, outside the Congress, should support men like Walter Jones. There are many other congressmen who fight for tobacco and who deserve support”²⁷⁸(emphasis added).

A TI correspondence written several years later (November 3, 1981) from Anne Duffin to Samuel Chilcote similarly discussed the impact of the hearing.

“Major value of the one-sided 1978 Jones tobacco subcommittee hearing was in getting into the public record the judgments of nine credible scientists that there was no scientific proof that ambient smoke harms health nonsmokers.”²⁷⁷

In subsequent years, submissions by legislative allies to the public record criticizing the science underlying attempts to further restrict smoking on aircraft remained an important tobacco industry tactic. In December of 1982, Rep. Fountain of North Carolina submitted to the Congressional record a statement contesting the findings of a study by White and Froeb that demonstrated adverse affects on lung function resulting from exposure to SHS in the workplace^{57,279}. The aforementioned research had been cited by the CAB in its 1981 supplemental notice of proposed rulemaking calling for public comment on whether it should ban smoking aboard all commercial aircraft or eliminate its rules entirely⁵⁶. The Congressman included critiques by tobacco industry consultants that the study was biased and not methodologically sound. He also referred to the expert witnesses appearing before the Tobacco Subcommittee in 1978 and reiterated that “those individuals who testified generally agreed that no conclusive scientific evidence exists to support the claim that smoking affects the health of nonsmokers.” Similar attempts to discredit research findings or authoritative opinions regarding the harms of

SHS took place when the airline smoking issue appeared on the legislative agenda in the late 1980s. At the suggestion of the tobacco industry, Rep. Jones (D-NC) entered into the Congressional record a statement of the reasons why he believes the conclusions of the Surgeon General's report on SHS are not supported by the research evaluated in the same document^{280, 281}. Similarly, Rep. Tom Delay (R-TX) submitted an extensive critique of the Surgeon General's report and the NAS study on cabin air quality²⁸². In 1989, the Journal of the American Medical Association (JAMA) published a study by the National Cancer Institute entitled "Passive Smoking on Commercial Airlines"²⁸³. The research demonstrated that passengers sitting in nonsmoking sections of aircraft are exposed to levels of nicotine similar to those found in smoking sections. Rep. Valentine (D-NC) responded on the industry's behalf by submitting comments to the Congressional record debunking the study's methods and findings²⁸⁴. The Congressman remarked that:

"...the JAMA study can be viewed as little more than a political document, written to fuel passage of legislation to ban smoking on all flights. In addition to the questions raised by the study on its face, I note that the Tobacco Institute repeatedly requested information concerning the study under the Freedom of Information Act but received only a small fraction of the documents that were undoubtedly in the government's possession."²⁸⁵

The previous quote illustrates yet another form of assistance offered to the tobacco industry. Congressional allies sought to acquire data and called for congressional review of a study that provided further justification for restricting smoking on aircraft. The industry's files contained several memorandum dating from mid 1980 to early 1981 from Congressmen Jones and Rose to Drs. James White and Herman Froeb, authors from the previously discussed study that demonstrated respiratory effects resulting from SHS^{57, 286-288}. The TI was kept apprised of progress on the attempts to access the raw data^{287, 289} and the industry sought formal investigation of the research hoping that "congressional review of the White/Froeb study which might assist in placing the burden of proof on anti-smoking groups"²⁰⁶. In a second correspondence to Dr. White from Rep. Jones dated December 1, 1980, the Congressman stated:

"This article [White and Froeb, 1980⁵⁷], which has continued to receive widespread attention, is adding significantly to the public uncertainty about the state of scientific knowledge regarding the public smoking issue. Its conclusions appear to conflict with testimony presented to the Tobacco Subcommittee by a panel of expert witnesses. Since members of the Subcommittee have a responsibility to provide the Congress with a full and complete understanding of the issue, it is essential that we have available the underlying data supporting your article and conclusions."²⁸⁷

The Congressman stated that his Tobacco Subcommittee planned to hold further hearings on public smoking featuring the White and Froeb study and warned Dr. White:

"If you fail to cooperate, we will have no other option but to devote the first day of hearings to obtaining the data. That effort will include a formal Subcommittee request for you to produce the data forthwith."

We did not find evidence of the investigators providing their data to the Congressmen or of any legal actions taken against them though Rep. Rose did meet in person with Dr. White on July 6, 1981²⁹⁰. Several days later,

Rep. Rose, who had by this time replaced Rep. Jones as the Tobacco Subcommittee Chairman, submitted a report from his subcommittee hearing to the Congressional record recommending that the work of White and Froeb “not be relied upon by the Congress, federal departments or agencies, other legislative or policy-making bodies when considering restricting on smoking in public places”²⁹⁰.

Internal files and public records demonstrate that friends in Congress also assisted the tobacco industry by influencing the direction of hearings and federal research on cabin air quality that arose on the legislative agenda in the mid to late 1980s. In 1982 and 1983 a series of Congressional hearings on the airline cabin environment³⁸,³⁹ led to the enactment of legislation mandating that the NAS conduct a review of the existing literature to determine whether cabin air quality was adequate for health and safety⁴⁰. By mid 1986 the study was completed. One of the report’s major conclusions was that smoking be banned on all commercial flights within the United States for four major reasons: to lessen irritation and discomfort to passengers and crew, to reduce potential health hazards associated with SHS, to eliminate the possibility of fires, and to bring cabin air quality into line with established standards for other closed environments. The NAS considered means of reducing SHS in aircraft by requiring structural or engineering changes but concluded that such physical barriers were not likely to be economically feasible. The report also found that if the lowest rate of ventilation permitted by current equipment design were used on flights at or near maximum passenger loads, the ventilation systems would provide acceptable air quality *only* if smoking and other contaminant sources were not present (emphasis added)¹².

The following September, the Senate Aviation Subcommittee held a hearing to discuss the NAS findings and recommendations. A September 10, 1986 TI memorandum discussed the work of tobacco industry lobbyist Judy Hope and her contacts with Senator Kassebaum (R-KS) the subcommittee chair²⁹¹. The correspondence, written by John Lyons, the head of the TI’s airline smoking program, stated:

“Senator Kassebaum is determined to prevent the hearing from turning in to a ‘smoking hearing’. It is not clear how she plans to do this since the report’s most obvious finding and recommendation centers on smoking...Significantly, several antismoking groups – notably ASH [Action on Smoking and Health] and GASP [Group Against Smoking Pollution] –have requested an opportunity to testify, but the subcommittee has turned them down”²⁹¹.

A correspondence circulated by President Samuel Chilcote a day later to members of the TI’s Executive Committee discussed further efforts of the subcommittee to influence the hearings content:

“Neither The Tobacco Institute, nor any anti-tobacco groups were invited to testify because the subcommittee wants to try to avoid focusing on the issue of smoking aboard aircraft...Witnesses have been asked to address the entire issue of cabin air quality and comment on recommended improvements²⁹²”

On September 23, 1986, tobacco industry lobbyist Mark Gerchick wrote to the TI’s Judy Wiedemeier praising the successful avoidance of smoking on aircraft as the focus of the hearing.

“We were pleased to read today’s Aviation Daily report on last week’s aviation subcommittee hearing regarding the NAS report. At least as it plays in the aviation trade press, TI’s position was not badly

served at the hearing. In fact, the only significant discussion of tobacco smoke in this press report reflects ATA ‘belief’ that ‘airlines oppose the recommended ban....’ Otherwise, the emphasis seems to be on airline industry performance”²⁹³.

In response to the NAS report, DOT Secretary Elizabeth Dole requested and received permission from the House Appropriations Transportation Subcommittee to further examine SHS in cabin air^{294, 295}. Fearing that the proposed study would narrowly focus on SHS in the aircraft environment, Congressional allies wrote to the DOT and Subcommittee Chair Lehman voicing concerns over the proposed study being narrowly focused on SHS and that the research be expanded to incorporate study of other factors in cabin air^{267, 295-297}. A February 4, 1988 correspondence from Rep. Lindsay Thomas (GA) to Chairman Lehman also suggested that the tobacco industry would even contribute funds to expand the study to other aspects of cabin air quality if necessary:

“I feel very strongly that a comprehensive study should be carried out. Quite frankly, I feel it would be useless and even counterproductive to do a study only on tobacco smoke while ignoring other possible air pollutants. If funding is a problem, I feel sure the industry would be willing to contribute resources to make a comprehensive study possible.”²⁹⁶

By March 1988, then Secretary of Transportation, James Burnley decided to expand the scope of the study to include “a more comprehensive analysis of cabin air quality”²⁹⁸. Industry documents attributed the change in focus to pressure from its Congressional allies^{267, 299, 300}. The TI was concerned, however, that the research would not be completed in time to assist in its efforts to prevent extension of the current airline smoking ban since the industry anticipated that its findings would exonerate tobacco smoke²⁹⁹. Efforts to compress the timetable for the study’s completion would not be successful^{299, 301}, nor would the tobacco industry and its Congressional allies succeed in its appeals through the Freedom of Information Act (FOIA) to obtain the scientific protocol^{225, 302 303}.

The DOT submitted its completed report to Congress in late 1989. Contrary to the tobacco industry’s hopes, the investigators concluded that of the contaminants studied, only cosmic radiation and SHS posed a health risk to cabin crew and frequent travelers. Mitigation strategies included a total ban of smoking on all passenger flights³⁰¹. The TI was able to obtain a copy of the report before its public release³⁰⁴ and worked with Congressional allies to encourage the DOT to minimize the public relations aspects of the study’s findings and to not recommend additional restrictions of in-flight smoking³⁰⁵. Several tobacco industry memos indicated the success of these efforts. The DOT released the cabin air quality report without publicity and without recommendations for additional action^{305, 306}.

The public record and tobacco industry documents provide evidence that Congressional allies also introduced legislation to repeal restrictions on airline smoking. During the 97th Congress, tobacco friendly legislators introduced several bills to stop the CAB from regulating smoking on aircraft. In July of 1981, Rep. Boner (D-TN) and Senator Cannon (D-NV) individually proposed legislation (HR 4147 and S 1450) that would repeal sections of the Federal Aviation Act viewed as the statutory basis for the CAB’s authority to regulate smoking. Just one month earlier, Senator Kassembaum (R-KS) introduced two pieces of legislation (S 1425 and 1426) that would accelerate the CAB’s sunset and prevent the transfer of the agency’s consumer protection

authority, including regulating smoking, to the DOT. The proposed laws were sent to their respective committee but no floor action in either chamber was taken (Table 2).

Future attempts to thwart smoking restrictions were considered by tobacco industry officials but not followed through. In a report of a State Activities Policy Committee meeting held on September 16, 1983, TI executives discussed whether the industry should encourage the introduction of an appropriations amendment to prohibit CAB funds for the enforcement of any new regulations restricting airline smoking¹⁵⁵. Chilcote and Temko “commented that the bill would not pass, would produce negative public relations and would set up a major congressional vote on the issue of smoking.” The industry’s files contained a letter written to the House Appropriations committee from the National Association of Tobacco distributors the following month but we found no evidence of further actions taken by either the tobacco industry or its Congressional allies³⁰⁷.

Campaign contributions and votes

An analysis of tobacco industry campaign contributions and congressional voting records on airline smoking was beyond the scope of the present case study. Instead, we present evidence from several tobacco industry documents that suggest money is not given to legislators without the expectation of support in the form of votes. The earliest document we uncovered was a memorandum dated July 15, 1987 from Stephen Bull to numerous executives at Philip Morris³⁰⁸. The correspondence entitled “Analysis of Vote on Durbin Amendment” stated:

“Attached is an analysis of the House vote on the Durbin amendment (prohibition of in-flight smoking), relating the presence or absence of a recent PHIL-PAC contribution to each Member. Your attention is drawn to the summary chart entitled “Members Voting Against Durbin Amendment”. You will note that, overall, 70% of those who supported our position were PHIL-PAC recipients. To conclude, however, a favorable vote to have been the result of that support is, of course, the classic logical fallacy post hoc ergo propter hoc.

It should be noted that those 43 Members who did not vote apparently were not merely ducking this issue; the same individuals also failed to vote on final passage of the DOT appropriation bill, the legislative vehicle to which the Durbin amendment was attached.

The main conclusion we might come to is that there is a number of Members who have received PHIL-PAC support but voted against us on this issue. Those individuals represent targets of opportunity for issues of greater importance, such as the excise tax and ad ban proposals. As we have discussed, with many of these individuals we can go to them, remind them of our previous support, point to their vote on Durbin as having violated a trust, and, quite validly, seek active participation in defeating these other proposals as evidence of their good faith”³⁰⁸ (emphasis added).

Two other tobacco industry documents discussing money and votes on airline smoking were written by Walter Woodson from the TI in 1989^{309, 310}. The first memo written May 3, 1989 to the Institute’s president recounts a meeting of National Tobacco Council lobbyists with South Carolina Senators Hollings and Thurmond

^{309, 311}. Senator Hollings indicated he would assist in derailing any bills regarding smoking on aircraft. Senator Thurmond, on the other hand, held to his view that smoking should be banned on airlines and had co-sponsored two pieces of legislation that would do so. One lobbyist, Tom Ragsdale, who was also a member of the Senator's finance committee stated that "co-sponsorship of the airline measures would make it more difficult for him to raise as much money, in some circles, as he had hoped to raise"³⁰⁹. Senator Thurmond responded "Well, I guess you'll just raise a little less money, then." In August of 1989, Woodson wrote a memorandum discussing the need for "further contacts with four House members who voted the 'wrong way' on the airline issue in Committee [House Aviation Subcommittee]"³¹⁰. Woodson states:

"It had been the understanding of Federal Relations staff and others that these four were 'friends' of the industry. In the case of Cox [R-CA], for example, The Institute and industry supported his initial run for congress in 1988. We do not often support nonincumbents ... The message to the four is that while we are sorry that we've lost their support on the airline smoking issue, 'we hope you are with us on other issues like taxes, advertising bans'"³¹⁰.

We also found in the tobacco industry's files a newspaper article reporting on tobacco industry contributions and votes on airline smoking in the 100th Congress. Written by the *Charlotte Observer* on August 5, 1987, the article compared how members of the House Committee on Public Works and Transportation voted on a measure to ban smoking on all domestic flights and the amount of tobacco industry political action committee contributions and honoraria they received in 1987 through 1988³¹². The study showed that members who supported the industry's position received 3.7 times as much in money as did opponents. Fifty-six percent of members who voted to ban smoking received a contribution from the tobacco industry versus eighty-eight percent of congressman voting against the ban.

Lobbying Content - Framing and reframing the debate

Illustrative quotes of the types of arguments used by the tobacco industry to support its position against airline smoking restrictions from 1976 through 1989 are depicted in Table 5. Note that similar claims were made throughout the policy process but that the industry's emphasis shifted when the airline smoking issue surfaced in the Congress. Legislation proposed in the 100th Congress was based on the conclusions and recommendations of authoritative reports and opinions regarding SHS published in 1986. The industry altered its predominant claims of government intrusion, discrimination, and lack of public support to the assertion that tobacco smoke is unjustifiably blamed for greater problems of overall cabin air quality. Improved ventilation and further study of all aspects of the aircraft cabin environment were proposed as solutions to any perceived problem of smoking on aircraft. A more detailed analysis of the arguments put forth by the industry with each regulatory and legislative proceeding follows.

The tobacco industry first openly participated in the CAB rulemaking proceeding that included a request for comments on the possible adoption of rules banning smoking aboard all aircraft in 1976. On behalf of the industry, the TI submitted written testimony arguing that the current segregation rule represents "an

accommodation of the interests of smokers and the relatively small number of passengers who object to smoking”³¹³. If anything, the rule was declared as discriminatory since most smoking sections are in the part of the aircraft where passengers are often the last to be served meals and to deplane, is the noisiest, and that implies “second class” status. The Institute maintained that promulgation of a rule banning smoking was not supported by the findings of the FAA/NIOSH study on cabin air quality, based on insufficient evidence of the harms from SHS, outside the scope of the CAB’s regulatory authority, and inconsistent with deregulation^{313, 314}. Smoking was said to be only one of many minor annoyances experienced in daily life and that further restrictions were being insisted upon by a “small but vocal minority of airline passengers or anti-smoking zealots” rather than the majority of air travelers³¹³. To provide evidence of the latter argument, the TI submitted supplementary comments to the CAB along with the results of its first petition drive. In the accompanying testimony, the TI claimed that it had “new information that demonstrates the objections of a substantial segment of the flying public to the present seating configuration and, by inference, to any further federal restrictions on the rights of smokers aboard airplanes”³¹⁵. The CAB responded to the assertion stating that the “TI offered no current statistics in support of its statement of majority preferences and such general statistics as are available do not tend to substantiate it. Neither the 132,000 signatures on the TI’s petition nor the more than 25,400 individual communications favoring either a ban on all smoking or a ban on cigars and pipes conclusively demonstrate the preference of the majority of airline passengers”⁵². Other allies within the tobacco industry stressed the importance of tobacco to the nation’s heritage and the economy³¹⁶, and that further restrictions would inevitably lead to a complete prohibition of the use of tobacco products³¹⁷.

The tobacco industry’s airline allies presented similar arguments to the CAB. In its written submissions, the airline industry contended that the present system of segregation was a reasonable compromise and that further intrusion into the subjective area of passenger discomfort was potentially discriminatory, not supported by the flying public, and incongruous with deregulation^{94, 318}. A complete ban was said to be difficult to enforce, would result in surreptitious smoking in lavatories and thus constitute a fire hazard, and would place some carriers at a competitive disadvantage^{94, 318, 319}. The ATA maintained that carrier experience with separate seating was generally positive and that there was a continued decline in the number of smoking complaints³¹⁸. The Board did not agree:

“Assertions of a reduction in complaints to carriers are, for the most part, vague and unsupported. The Board has consistently received a substantial number of informal complaints concerning smoking on US schedule carriers. Furthermore, the record in this rulemaking alone contains thousands of complaints from persons who find the present system unsatisfactory and the Bureau of Enforcement has prosecuted 48 smoking violations”⁵².

In subsequent rulemaking proceedings, the TI coordinated written and oral testimony with the airline industry reiterating earlier claims and arguing for revocation of the CAB’s smoker segregation rule^{100, 151, 209 320-322}^{58, 152, 173, 323, 324}. The TI added that further restrictions would be difficult to implement, could have economic consequences for some airlines, and that smoking aboard aircraft should be left to the managerial discretion of

each air carrier^{58, 152, 320, 324, 325}. The TI continued to counter any evidence of health effects resulting from exposure to SHS put forth as a basis of further restrictions as methodologically flawed, inapplicable to the transitory nature of exposure during flight, and irrelevant given the purportedly well-ventilated aircraft environment^{15, 16, 58, 173, 207, 320, 322, 326, 327}.

During the last CAB rulemaking proceeding in 1983, the TI presented testimony that included results from its opinion poll and petition drive as evidence of the assertion that further restrictions are not supported by most air travelers^{173, 324, 328, 329}. The Institute added that the number of letters in the CAB docket “also reflect support for the current arrangements”³²⁹. Two consultants for the tobacco industry testified at the hearing held on the proposed rules^{157, 223, 221}. Philip Schaenman responded to claims of safety risks associated with cigarettes aboard aircraft. Presenting research sponsored by the TI, Schaenman stated that his review of data from the National Transportation Safety Board (NTSB) did not indicate a serious fire hazard. He added that increased surreptitious smoking in lavatories, however, could create significant risks²²³. The industry’s scientific consultant, Theodor Sterling, responded to health claims associated with ambient cigarette smoke as unfounded and based upon flawed research^{157, 221}. He postulated that observed health effects might be a consequence of “total life-style of the family” rather than resulting from exposure to SHS (Table 5).

With the emergence of the airline smoking issue in Congress in 1987, the arguments put forth by the industry stressed the lack of empirical data linking SHS exposure to purported claims of symptoms and discomfort on aircraft and that further study of all aspects of cabin air quality was needed¹⁵. The TI and its scientific consultants attacked the validity of the recommendations of the NAS report on cabin air quality and the NAS and Surgeon General reports on SHS. They contended that the conclusions in these reports were inconsistent with the scientific literature reviewed within the documents. The results from the first tobacco industry-sponsored study on cabin air quality were submitted by RJ Reynolds chemist William Crouse to support the assertion that there is near-negligible exposure of passengers in the nonsmoking section to SHS and that “additional studies will be required in order to truly understand the nature of air quality within aircraft cabins”¹⁵. Former Congressman and TI witness Charles Whitley contended that smoking aboard aircraft is already sharply restricted and that federal aviation agencies have considered rules for smoking aboard aircraft for over a decade and continued to reject proposals to ban smoking (ibid). Additional industry-sponsored studies of public opinion and aircraft fire incidence were also submitted to the record. Whitley misled policymakers by inferring that the ALPA poll had been conducted independent of the tobacco industry and sought to discredit the results of a survey of over 30,000 air travelers that showed strong support for a smoking ban.

Numerous memoranda were uncovered in the internal files discussing points that the tobacco industry should address in the legislative hearings to expand or extend the temporary ban of smoking on short flights in 1989^{217, 327, 330, 331}. A June 5th correspondence from the TI’s John Lyons to a law firm working with the industry stated:

“We would like to retain much of the substance of the 1987 testimony, but obviously, certain things have changed. Most important, the two-hour ban has been implemented with little measurable opposition. Consequently, our public opinion arguments must be reconsidered.

Our immediate objective is to put the brakes on Oberstar [Chairman of the House Aviation Subcommittee]. He has indicated his desire to move legislation to ban smoking on all flights. This hearing is legislative, not just jurisdictional. Therefore, our key theme must be ‘wait for the DOT study.’ Legislative or regulation action prior to completion of the study would be premature.

We anticipate Gray Robertson making a lengthy presentation during the hearing on cabin air quality issues. Whitley’s testimony should not duplicate Gray’s pitch, but it should raise serious and substantial questions about cabin air quality and aircraft ventilation systems and the apparent lack of regulation in this area. ETS should be put in perspective as but one of many components of cabin air”³³¹. Testimony at the hearing stressed the themes discussed in the aforementioned memo¹⁶. A published review of the existing literature on cabin air quality conducted by industry consultant, Larry Holcomb, was also referenced to support the claim that levels of SHS on aircraft do not adversely affect nonsmoking passengers and crew¹⁶. TI witness Charles Whitley repeated the industry’s earlier claim that the majority of Americans do not support the prohibition of smoking on aircraft despite the industry’s private admission that current public opinion data reflect support for a ban.

The ATA and individual carriers did not appear at the Congressional hearings on the issue in 1987 or in 1989. Both years, the association submitted written testimony on behalf of the airline industry stating that it supported the status quo but that it would not oppose more restrictive legislation. The ATA asked however, that any smoking ban be implemented so as to not cause competitive disadvantages among air carriers^{15, 16}. Although the ALPA was an ally of the tobacco industry during Congressional proceedings in 1987, the association did not testify or submit comments to the public record¹⁵.

Public Relations Campaigns

The tobacco industry planned and executed public relations (PR) campaigns to promote its position on airline smoking throughout most of the twenty-year policy process. A TI memorandum dated January 25, 1977 from William Kloepfer to other Institute executives announced the industry’s describes its first PR efforts⁹². Kloepfer stated:

“TI broke precedent with formal entry into the proceeding—previous federal regulation having been bouts between antismokers and carriers—in a statement to CAB opposing additional regulation. The PR staff distributed a news release on the statement, including all travel editors and travel trade publications, and obtained wire service coverage. We also prepared letters to some 30 tobacco organizations for Horace Kornegay, urging them to express their own views in the proceeding. At Malcolm Fleischer’s suggestion, we provided 25,000 fliers for distribution to customers in member stores of the Retail Tobacco Dealers of America, alerting them to the CAB proposals and providing the CAB’s address”⁹².

The PR campaign also disseminated the results of the industry-sponsored airport petition drive as evidence that the public does not endorse further restrictions on in-flight smoking^{91, 92, 168}.

To combat the CAB's proposed rules that included a ban of smoking on short flights in 1983, the TI launched a campaign that promoted the results of the industry sponsored public opinion survey on airline smoking^{105, 332, 333}. The media plan included placement of the study's results on major news wires, magazines, daily newspapers, travel editors and commentators. Spokesman for the industry conducted both national and local radio and television interviews. In a November update on the industry's efforts, TI Vice President Kloepfer stated that the "media contacts on this matter are the broadest in scope of any project we've tackled"¹⁰⁵.

In future PR efforts, the industry continued to purport a lack of public support for a smoking ban on passenger flights backed by its own survey research³³⁴. However, in 1986, media activity centered on discrediting and preempting evidence and authoritative opinions serving as a basis for further restrictions. The industry responded to the NAS cabin air quality report and recommendations with a PR plan implemented in anticipation of the document's public release. The day before the NAS press conference, the industry announced the results of its own cabin air quality study and claimed that existing evidence did not support the NAS recommendation to ban smoking on all aircraft³³⁵. A memo dated August 15th from President Chilcote to members of the TI's executive committee touted the success of the industry's plan to generate controversy regarding the NAS study³³⁶. Chilcote stated:

"The report was greeted with much skepticism from the airline industry, organized labor, and in many cases, the news media. These results were achieved in close cooperation with staff at R. J. Reynolds. As reported previously, Institute staff has been aware for sometime that the committee would recommend a smoking ban. Late last week we learned of the committee's plan for a press conference, and took immediate steps to ensure that the report was greeted with sufficient controversy to prevent acceptance by policy makers (e.g., Senator Hatch and the Department of Transportation) at face value. Our strategy was two-fold. First, to maximize coverage of the industry's position, raising legitimate and necessary questions as to the validity of the report's recommendations. Early intelligence enable us to proceed with a pre-emptive press conference on August 12, the day before the NAS event, to announce results of the R.J. Reynolds' in-flight air quality tests and to reaffirm public support for current regulations. The second prong of our strategy was to ensure little support for the recommendation among airline management and organized labor. Both strategies were successful."³³⁶

The TI's September 1986 monthly media relations report described the industry's success in obtaining prominent coverage³³⁷. Written by Scot Stapf, the update stated:

"The TI press conference—the first such national event in years—was covered by all three television networks and Cable News Network. ...An informal survey revealed widespread use of the TI-produced national radio satellite feed. A more detailed survey indicated that the TI-produced television news satellite package was used by 314 (48.5 percent) of 648 targeted TV station, a penetration of 137 (65.7 percent) of the top 208 media markets."

The PR component of the tobacco industry's two-year strategic plan to ensure sunset of the ban of smoking on short flights emphasized tactics to communicate with smokers and to motivate them to complain about the ban and demand to be accommodated¹⁸⁶. The industry understood that without a public outcry from smokers, repeal of the ban was unlikely. To create the appearance of a smoker's revolt, the TI funded and coordinated numerous PR activities for Dave Brenton of the SRA (see section Smoker's Rights and other Front Groups)^{122, 160, 338}. The media efforts included television and radio appearances, and information booths, signature gathering, and demonstrations at airports throughout the country. The TI and the SRA produced a video news release of the group protesting the smoking ban that was made available to more than 300 network affiliates nationwide^{122, 338}. Also during this time period, the TI and the SRA worked cooperatively to challenge the decision by Northwest officials to voluntarily ban smoking on all domestic flights¹²¹.

By 1989, the TI's media relations team once again focused on attacking unfavorable research findings. PR efforts included attempts to discredit a poll that demonstrated overwhelming public support for banning smoking on passenger flights³³⁹⁻³⁴² and of a study conducted by investigators at the National Cancer Institute and the Environmental Protection Agency that showed that passengers seated in non-smoking sections are exposed to nicotine levels comparable to passengers in the smoking sections of aircraft (Mattson et al., 1989)^{225, 284}. The TI efforts sought and obtained nationwide mainstream media coverage for its scientific expert, Gray Robertson, who touted the industry's position of a lack of health effects associated with exposure to SHS on aircraft and the need for better ventilation²²⁵.

Fund Research

The tobacco industry conducted research to support its arguments against restricting smoking on aircraft as well as to refute evidence of public support and safety or health hazards resulting from smoking on passenger flights.

Public Opinion Surveys

The tobacco industry conducted a series of public opinion surveys on airline smoking restrictions and selectively publicized the findings that supported its position while keeping hidden those that did not. The first research on public attitudes toward smoking aboard aircraft sponsored by the industry appears to have been conducted in 1970. The results of these studies along with polls sponsored by other organizations from 1970 through 1989 are shown in Table 6.

A survey conducted in 1976 by Roper for the TI contained data regarding smoking on public conveyances biannually from 1970 through 1976³⁴³. In the 1970 survey, participants were asked directly if "smoking should be banned on all planes and buses". Fifty-two percent agreed with the statement. In the subsequent Roper polls, questions on airline smoking would first address attitudes towards smoking sections followed by direct queries regarding a complete prohibition. These surveys demonstrated greater support for segregating smokers (65 to 77%) as opposed to abolishing smoking (26 to 27%). The Roper reports noted that their results consistently

demonstrate that when participants are asked generally whether or not they favor more or less government to protect the public, most people favor less intervention. However, when questions regarding government control of cigarette products are focused on more directly, there is increasingly widespread public support for restrictions^{343, 344}.

The first public opinion research openly sponsored by the tobacco industry and utilized to support its position against further restrictions of smoking on aircraft was conducted in 1983¹⁰⁴. Carried out by Tarrance and Associates for the TI, the telephone survey found that 83% of 1,000 air travelers felt that the present arrangement of separate seating for smokers and nonsmokers “works pretty well in making all passengers comfortable”. The industry did not disclose, however, the results of the pilot study (300 respondents)^{155, 345, 346}. A September 1983 memorandum from TI Senior VP William Kloepfer to the Institute’s President discloses these preliminary findings and states:

“On our pilot survey of airline passengers, we do not have reassuring results. While the great majority feel that present arrangements are OK, their number diminishes the moment they are told of possible new regulations. We came out 50% for and 38% against the prohibition of smoking on planes with fewer than 60 seats. We came out 46-47 on the two hours or less prohibition.” (emphasis in original)³⁴⁵.

Specific questions on proposed regulations or legislation as used in the pilot survey would not appear in the full study nor on any subsequent publicly disclosed surveys sponsored by the industry. Furthermore, the 1983 final report falsely stated in its overview that “The Tobacco Institute was unaware of any significant public demand from air travelers to change the present arrangement”¹⁰⁴. The TI hired Tarrance and Associates again in 1985 to repeat the survey. The findings were nearly identical with 82% of 1,000 respondents indicating that they approved the current arrangement of segregating smokers and nonsmokers¹¹⁵. The data from these polls were used repeatedly in public commentary and hearing testimony to provide evidence of its claim that there was no public support for further restricting smoking on aircraft (see section Lobbying content-framing the debate).

During the same two-year period, Philip Morris and the Georgia Lung Association (GLA) studied air travelers’ attitudes toward smoking restrictions on aircraft and found results consistent with the findings from the TI’s pilot study. The GLA poll conducted among 5,502 air travelers in 1983 found that 61.9% preferred the CAB proposal to ban smoking on airline flights of one hour or less, 13.6% objected to the proposal, and 24.4% were neutral³⁴⁷. An undisclosed survey sponsored by Philip Morris a year later showed that 55% of 101 nonsmokers and 13% of 99 smokers strongly approved of a smoking ban on all airplane flights. Less than one-half of the smokers surveyed (46%) and 6% of nonsmokers strongly disapproved of a ban³⁴⁸.

In 1987, the TI worked with the ALPA to commission a survey of passenger attitudes on a wide variety of airline issues including smoking on passenger flights³⁴⁰. Conducted by the polling firm Hamilton, Frederick & Schneiders, 87% of the 1,000 participants indicated that the “practice of separating smoking and nonsmoking passengers is a reasonable policy that respects the rights of each.” The TI publicly claimed to not have been

involved with this research in its testimony to Congress¹⁶. Internal documents show, however, that the TI paid for the study and worked with the ALPA to develop the questionnaire^{211, 349}.

Three other public opinion polls were conducted independent of the tobacco industry in 1987 that revealed public support for a smoking ban. At the 1987 House Aviation Subcommittee hearing on airline smoking, a representative of the International Foundation of Airline Passenger Associations presented data from its world-wide survey of passengers' attitudes toward smoking on aircraft^{15, 350}. The study found that 60% of all U.S. passengers (7,200 respondents) supported a smoking ban on flights up to 2 hours and that 48% favored a ban on all flights¹⁵. Only 17% indicated that they preferred dividing the aircraft cabin between smokers and nonsmokers. A survey sponsored by the American Medical Association showed that 67% of its 1,500 study participants indicated smoking should not be allowed on aircraft³⁵¹. The American Association of Respiratory Care (AARC) conducted a study among over 33,000 airline passengers and found that 64% favored a smoking ban on all flights³⁵². The TI attacked the credibility of the latter study (see Public relations campaigns and Lobbying content-framing the debate). The TI wrote the American Association for Public Opinion Research (AAPOR) and the National Council on Public Polls (NCPP) claiming that the AARC's public release of findings without full disclosure of its methods violated codes of professional ethics and practices and urged that the organizations review the survey's methodology^{353, 354}. The duplicate letters stated:

“Polling procedures such as those used by the AARC must not go uncensured by the survey research community...In addition, this issue must be viewed in a larger context—that of the use of research results as a basis for public policy decisions. The results of the AARC survey were included in the public hearing record of the House Subcommittee on Aviation in its deliberations on legislation to ban smoking on airlines. I am sure you will agree that questionable or invalid polling results should not be used to formulate public policy...Action by the [NCPP or AAPOR] -- such as a letter to the AARC delineating disclosure standard -- could help to prevent other organizations from disseminating poll results which do not meet ethical standards. A similar statement, submitted to the congressional hearing record, would be an excellent counterbalance to the AARC's submission of its ‘polling results’”^{353, 354}.

We could not find any evidence of the AAPOR or the NCPP taking action against the AARC in the Congressional record. The industry files did contain, however, a copy of a letter sent by the NCPP to the AARC delineating its disclosure standards³⁵⁵.

By 1989, the TI privately conceded that public opinion favored bans on airline smoking^{74, 356}. A May 1989 memo to TI Executive Martin Gleason from John Lyons states:

“There is \$50,000 in the airline budget for a public opinion survey in 1989. I do not anticipate conducting this survey. (Crafting useful questions would be extremely difficult, and other surveys in the last 12 months suggest we would not like the results)”³⁵⁶.

In a July 1989 progress report on the airline smoking strategy, Lyons confirmed that public opinion research among voters in tobacco states would not be undertaken due to the apparent acceptance of the two-hour ban. He reported findings from a survey conducted by a Tennessee congressman where 70 percent of constituents

participating in the poll supported a total in-flight smoking ban⁷⁴. Publicly, however, the TI maintained that the general public did not support banning smoking on aircraft. The TI attacked the second survey of the AARC released in 1989 that found that 84% of those surveyed (27,667 adults surveyed at airports nationwide) approved the ban on flights of two hours or less and 67% indicated the ban should be extended to all flights³³⁹. In a press release, the TI claimed that the study was methodologically flawed and stated that the “AARC ‘findings’ are not consistent with other more reliable measures of public opinion”³⁴¹. The AARC responded to the TI’s claims by challenging the Institute to work cooperatively to conduct another poll. The offer was declined²²⁵.

Cabin Air Quality

The tobacco industry began to study SHS and the cabin air environment in the mid 1980s. The first study, conducted by RJ Reynolds scientists, measured nicotine on narrow-bodied aircraft and sought to assess the effectiveness of smoking sections as a means of reducing exposure to SHS¹¹³. The objective of the study, as stated in a November 1985 “Individual Performance Plan” for the principal investigator Guy Oldaker, was “to provide a scientific perspective on the issue of ETS which is expected to be raised at Congressional hearings on the subject of aircraft cabin air quality scheduled to be held during April 1986”³⁵⁷. The investigators concluded that segregation significantly reduces exposure to SHS in nonsmoking sections and that the aircraft ventilation system is primarily responsible for achieving this reduction¹¹³. The work was submitted to the journal *Environmental Science and Technology* but initially rejected³⁵⁸. The summary of the reviewers’ comments on the original manuscript follows:

“This paper presents important and timely data on vapor-phase nicotine concentrations in aircraft cabins, a microenvironment in which air pollutant measurements are seldom made. Unfortunately, the authors misinterpret, over-interpret, and over-extend their data. The statistical analysis is simplistic and inadequate. The authors’ conclusions diverse so drastically from the data presented that it is hard to believe that they were looking at the same numbers as we were.

“Given the unsupported conclusions, contentions, and statements made by the authors, we do not recommend publication unless they undertake a major revision of their manuscript. The authors must acknowledge that their study is exploratory, is based on a relatively few number of measurements, and is useful primarily for improving the design of future studies. This is not a “representative” study that provides data which can be generalized to all similar aircraft. We encourage the authors to revise and restructure their manuscript so that the conclusions are appropriate for the data presented.”³⁵⁹

The paper was revised and published by the journal in 1987¹¹³ and was used in testimony by the industry’s scientific experts at Congressional hearings on airline smoking in both 1987 and 1989^{15, 16}. Oldaker et al., conducted a follow up investigation that measured nicotine, respirable suspended particles (RSP, and ultraviolet particulate matter in cabin air. The study similarly concluded that smoker segregation was effective in reducing exposure of passengers in nonsmoking sections to SHS³⁶⁰. The paper was rejected by *Environmental Science and*

Technology³⁶¹ and was published without peer review two years later in a book entitled “Indoor Air Quality and Ventilation”³⁶⁰.

Two other investigations of the cabin air environment were conducted by the tobacco industry in the time frame of our case study: a collaborative effort by Philip Morris and RJ Reynolds on Japan Air Lines (JAL)³⁶²⁻³⁶⁴ and a study sponsored principally by Philip Morris on Scandinavian Airlines Systems (SAS)¹¹⁴. Both studies concluded that the ventilation systems on aircraft are successful in keeping SHS within the smoking sections of aircraft with little discharge into nonsmoking areas. Only the work of Drake et al., was completed in time to be used in industry testimony before Congress in 1989¹⁶.

Nielsen and Glantz identified internal documents detailing the tobacco industry’s involvement with the cabin air quality study performed on SAS aircraft³⁶⁵. Their analysis showed that several tobacco companies, led by Philip Morris, were involved in the funding, design, conduct, interpretation and presentation of findings while simultaneously seeking to obscure industry control. Tobacco industry lawyers and scientists were found to have deleted results from the study deemed unfavorable to the industry. A twenty-one page section entitled “Analysis of results” was removed from the original report before being presented to executives at SAS. Among the deleted information was the statement that “the results for the ETS components, nicotine, respirable dust and CO₂ indicate that substantial longitudinal transport of cabin air takes place”. This conclusion ran counter to the tobacco industry’s repeated claims that smoker segregation and ventilations systems are an effective means of controlling exposure to SHS on passenger aircraft. The presentation of data was also revised before the study’s publication. The draft reported standard deviations and full ranges of measurement values while Malmfors et al.,¹¹⁴ presented standard errors of the mean and 5%/95% ranges in separate tables. Nielsen and Glantz remarked that while the presentation of findings was not incorrect, it was misleading³⁶⁵. Especially important was the omission of the maximum values recorded since these data are generally the most important for regulatory purposes^{32,365}. The published manuscript was carefully worded in order to further downplay the study’s findings³⁶⁵.

A systematic review of studies of in-flight air quality by Repace showed that tobacco smoke was a significant source of air contamination and that its components were absorbed by passengers and crew in both the smoking and nonsmoking sections of aircraft³². Whether sponsored by the government, nongovernmental organizations (NGOs), airlines, or the tobacco industry, the studies yielded similar findings. However, while the investigators of the government, NGO, or airline funded research concluded that banning smoking was the only means to control exposure to SHS, the tobacco industry’s interpretation was that adequate ventilation could solve any perceived problem (ibid).

Intimidation

Economic

The tobacco industry sought to intimidate individual airlines that voluntarily adopted more restrictive airline smoking policies through various means including protest letters, boycotts, firings, and credibility attacks. The most notable of these efforts was in response to Northwest Airlines. A month before implementation of the

smoking ban on flights of two hours or less in April 1988, the airline publicly stated it would voluntarily make all of its domestic flights smoke-free. The TI acted quickly and aggressively and within hours of the announcement, Institute spokespersons responded to media queries and made appearances on major news networks attacking the airline. The TI sought to portray the decision as a public relations gimmick and focused on the purportedly poor record of passenger complaints and safety violations at Northwest^{125, 366}. It also called for a boycott of the airline¹²⁵.

The individual tobacco companies also mobilized to attack Northwest. RJ Reynolds retaliated by firing the agency Saatchi & Saatchi that was responsible for creating the Northwest campaign advertising its voluntary ban^{30, 124}. In response, the airline announced it would move the portion of its consumer advertising dealing with smoke-free flights to another advertising agency³⁶⁷. An executive at Northwest stated “We are extremely disappointed that a reactionary faction of the tobacco industry continues to put literally dozens of Saatchi and Saatchi professional careers in jeopardy. We want to ensure that Saatchi and Saatchi can continue to serve us with total objectivity and enthusiasm”³⁶⁷. According to Northwest Airlines VP of Marketing, A.B. Magary, Philip Morris applied the most pressure to intimidate the company¹²⁴. In an interview with the magazine Advertising Age, Magary reported that Philip Morris barraged the airline with disruptive phone calls to its 800 reservation number, called for a boycott, and sent more than 6900 mailgrams protesting the smoking ban^{124, 368}. During a Congressional press conference on the eve of implementation of the airline smoking ban, a spokesperson from Northwest airlines claimed that the campaign by Philip Morris to tie up its reservations lines had not been successful³⁶⁹. Later statements indicated that Northwest Airlines did not lose passengers despite the tobacco industry’s efforts³⁶⁶.

Political

Lautenberg re-election campaign

Faced with the possibility that the temporary ban of smoking on flights of two hours or less might become permanent or expanded to include all domestic flights, the tobacco industry sought to politically intimidate one of the smoking bans leading proponents. Two senior officials from the TI approached one of Senator Frank Lautenberg’s campaign staff during his re-election campaign in 1988 and threatened to back the Republican opponent, Pete Dawkins, if the Senator continued to pursue further smoking restrictions on airlines¹²⁶. Lautenberg did not comply. The industry made good on its threat and raised substantial sums of money in PAC and individual contributions including a fundraiser in North Carolina sponsored by RJ Reynolds. The Lautenberg campaign learned that Dawkins would be flown to the fundraiser in a RJ Reynolds jet and greeted him at the airport with a video camera as he deplaned. The footage was placed in a campaign ad. Despite the industry’s efforts, Senator Lautenberg was re-elected.

Discussion

This longitudinal analysis reveals the progression of tobacco industry motives and actions to influence the first federal restrictions of public exposure to SHS. In the first regulatory proceeding that resulted in the adoption of a rule requiring smoking sections on aircraft, the tobacco industry sought to operate beyond public view. Working primarily through the Tobacco Institute, the industry openly entered the conflict when the CAB requested comment on banning smoking on passenger flights while continuing its covert activities. Faced with continued attempts to expand restrictions on aircraft, the industry marshaled a vast range of activities as it became more desperate. These included grassroots lobbying, public relations campaigns, coordinating with its allies in the airline industry, support from Congressional allies and scientific experts, conducting research, and intimidating adversaries. The strategies and tactics employed are not presently viewed as noteworthy, however, our examination of a single policy area over nearly two decades offers insights into how the industry efforts evolved.

The tobacco industry realized from the inception of the policy process the importance of generating public support against restricting smoking on aircraft. Our analysis shows that the industry intensified its efforts to mischaracterize the public record via covert letter-writing campaigns, petition drives, and the conduct of public opinion polls. Survey research findings contrary to the industry's position were suppressed and the industry sought to hide its involvement in future polls. It is noteworthy that only a few of the industry's strategies to mischaracterize public opinion were exposed, mostly near the end of the twenty-year process (e.g., correspondence to congressmen and the sponsorship of the SRA). Also the extent of the effectiveness of its' grassroots mobilization efforts was not revealed. For example, the tobacco industry's surveillance of the docket contents during several regulatory proceedings showed that in the absence of industry driven letter-writing campaigns, public preference indicated strong support for banning smoking on aircraft. Public health advocates should consider their own monitoring efforts in future proceedings to detect similar evidence of malfeasance. Such findings should be exposed to both policymakers and the general public. It is likewise important to distinguish between industry sponsored public opinion surveys and truly independent data. Tobacco control advocates should endeavor to call for full disclosure of the design and methods of surveys conducted by the tobacco industry and its potential allies.

The tobacco industry formed an early alliance with and sought to hide behind the airline industry. However, with the emergence of further evidence of the harms of SHS and the NAS recommendation to ban smoking on all commercial flights, the tobacco industry lost its key ally. The industry formed a temporary political allegiance with the ALPA. Finally, the tobacco industry sought to economically intimidate an air carrier that banned smoking voluntarily and to unseat a political opponent. Neither strategy was successful. Whereas Pan et al.,²⁷ and Holm and Davis²⁶ have demonstrated the importance of the role of flight attendants and public health advocates in the fight for smoke-free airlines, our findings suggest that disruption of the tobacco industry's alliances with other stakeholders in the airline industry was also important for its defeat.

As expected, the tobacco industry concentrated much of its efforts on direct lobbying and relying on its Congressional allies once the airline smoking issue reached the congressional agenda in 1987. Assistance from friends in Congress took many traditional forms including lobbying colleagues and testifying or submitting comments on the tobacco industry's behalf. The most notable findings, however, were successful efforts to influence the direction of hearings and federally funded research and attempts to publicly discredit scientific evidence. Tobacco control advocates could deflate future efforts to bias the public record by encouraging Congressional supporters to submit counter statements to expose and question the work of tobacco industry sponsored research and scientific experts.

Research using internal documents has certain limitations as previously described.³⁷⁰ It is not always clear if the tobacco industry's plans were in fact implemented and the available records are likely to be incomplete. We sought to circumvent these problems by employing an exhaustive search strategy and relying on multiple outside sources, including contemporaneous public records, press accounts and other relevant research. Despite the inherent limitations, this in-depth examination of twenty years of tobacco industry strategies contributes to the current understanding of the how the industry responds to continued attempts to restrict the use of its products and how those efforts might intensify over time. Although the industry was ultimately unsuccessful in preventing a smoking ban on passenger aircraft, it managed to delay effective regulation for nearly two decades that would have protected nonsmokers. Only a few of its efforts were exposed and this occurred late in the policy process. Public health advocates need to anticipate the industry's actions and respond a timely manner especially regarding transparency and exposure of tobacco industry's activities.

Table 1: History of Federal Actions on Smoking and Other Key Events 1964-2000^{1,2,3}

1964	Surgeon General’s Committee on Smoking and Health concludes: “Cigarette smoking is a health hazard of sufficient importance in the United States to warrant appropriate remedial action.”
1965	Congress passes the Cigarette Labeling and Advertising Act requiring health warnings on all cigarette packages and advertisements.
1967	In response to a petition filed by John F. Banzhaf, the Federal Communications Commission rules that radio and television stations broadcasting cigarette commercials must donate airtime to smoking prevention messages.
1970	Congress enacts the Public Health Cigarette Smoking Act of 1969 banning cigarette advertising on television and radio effective January 1, 1971. It also requires a stronger health warning on cigarette packages.
1972	Surgeon General’s report on smoking and health is the first to examine the evidence on “public exposure to air pollution from tobacco smoke.” The report concludes: “It is high time to ban smoking from all confined public places such as restaurants, theaters, airplanes, trains, and buses”.
1973	Civil Aeronautics Board requires domestic airlines to provide designated “no smoking” areas aboard aircraft effective July 1, 1973. Arizona becomes the first state to restrict smoking in a number of public places including elevators, indoor theaters, libraries, art galleries, museums, concert halls, and buses.
1974	Interstate Commerce Commission (ICC) adopts separate sections for smokers and nonsmokers on interstate buses.
1975	Minnesota enacts the first comprehensive “Clean Indoor Air Act” requiring no-smoking areas in all buildings open to the general public.
1976	ICC adopts separate sections for smokers and nonsmokers on interstate trains.
1982	Congress temporarily doubles the federal excise tax on cigarettes to 16 cents per pack, to be effective January 1, 1983 to October 1, 1985. It is the first increase since 1951.
1984	Congress enacts the Comprehensive Smoking Education Act, requiring that health warnings on cigarette packages and advertisements be rotated. Surgeon General Koop calls for a smoke-free society by 2000.
1986	Congress extends permanently the 16 cents per pack federal excise tax on cigarettes. NAS and the Surgeon General issue reports concluding that exposure to secondhand smoke is a cause of lung cancer and respiratory disease in nonsmokers. NAS also issues its report on airline cabin air quality and calls for a total smoking ban on all domestic commercial flights. General Services Administration, Department of Defense, and Veteran’s Administration ban smoking in common areas under their jurisdiction.
1987	Congress mandates a smoking ban on domestic airline flights of 2 hours or less effective April 1988.
1989	Congress mandates a smoking ban on domestic flights 6 hours or less effective February 1990.
1990	ICC bans smoking on all interstate buses and trains.
1992	Congress enacts the first federal legislation to require states to adopt and enforce restrictions on tobacco sales to minors.
1993	Federal cigarette excise tax increases to 24 cents. Congress enacts smoke-free policy in facilities where federally funded children’s services are provided (Pro-Children Act of 1994). EPA releases its final risk assessment and classifies environmental tobacco smoke as a Group A carcinogen
1996	FDA publishes a final rule that it will regulate the sale and distribution of cigarettes and smokeless tobacco to children and adolescents. The Supreme Court invalids the rule in 2000.
1997	President Clinton signs order mandating smoke-free government workplaces
2000	Airline smoking ban is extended to international flights

¹Contents of the table were adapted from ³⁷¹, ³⁷², ², and ³⁷³

²Table excludes Congressional actions on smokeless tobacco products and tobacco crop subsidies

³Bold indicates federal actions on airline smoking

Table 2: Timeline of Airline Smoking Authorizing Legislation: 91st through 101th Congresses (1969 through 1990)¹

Congress	Bill Number(s)	Intent	Action
91 st 1969-70	HR 14742 S 3255	Would require air carriers to reserve a section of each passenger-carrying aircraft for passengers who desire to smoke.	Referred to House Committee on Interstate and Foreign Commerce; Referred to the Senate Committee on Commerce.
92 nd 1971-72	HR 190, HR 877, HR 4776 S 1298, S 3249	Would require air carriers to reserve a section of each passenger-carrying aircraft for passengers who desire to smoke.	Referred to House Committee on Interstate and Foreign Commerce; Referred to the Senate Committee on Commerce
93 rd 1973-74	HR 768, HR 15244, S 2219	Prohibits smoking aboard aircraft, railroads, buses, and vessels carrying passengers, except in areas designated for that purpose.	Referred to House Committee on Interstate and Foreign Commerce; Referred to the Senate Committee on Commerce
	HR 13040², HR 13853	Prohibits smoking aboard certain aircraft. Provides a fine of not more than \$500 for a violation of this Act.	Referred to House Committee on Interstate and Foreign Commerce
94 th 1975-76	HR 491	Prohibits smoking aboard certain aircraft.	Referred to House Committee on Public Works and Transportation
	HR 1227	Requires common carriers by air, rail, or motor vehicle to designate a portion of their seating capacity to nonsmoking passengers only.	Referred to House Committees on Public Works and Transportation, and Interstate and Foreign Commerce
95 th 1977-78	HR 2239	Requires common carriers by air, rail, or motor vehicle to designate a portion of their seating capacity to nonsmoking passengers only.	Referred to House Committees on Public Works and Transportation, and Interstate and Foreign Commerce
	HR 8592	A bill to clarify the rights of smokers and nonsmokers aboard air carrier aircraft. Amends the Federal Aviation Act of 1958 to prohibit air carriers from giving any undue preference to passengers who use, or do not use, tobacco products	Referred to House Committees on Public Works and Transportation
96 th 1979-80	HR 1477	Requires common carriers by air, rail, or motor vehicle to designate a portion of their seating capacity to nonsmoking passengers only.	Referred to House Subcommittees on Surface Transportation and Transportation and Commerce, respectively. Executive Comment requested from DOT, ICC, OMB. No Floor Action.
97 th 1981-82	HR 1679	Requires common carriers by air, rail, or motor vehicle to designate a portion of their seating capacity to nonsmoking passengers only.	Referred to the House Subcommittee on Surface Transportation. Executive Comment requested from CAB, DOT, ICC. Favorable Executive Comment Received from CAB
	HR 4147	A bill to provide for the continued deregulation of the Nation’s airlines, and for other purposes. The measure, entitled the “Airline Deregulation Act Amendments of 1981” would repeal the section of the Federal Aviation Act viewed as the statutory basis for the CAB’s authority to regulate smoking.	Referred to House Subcommittee on Aviation. Unfavorable Executive Comment Received from CAB.
	HR 6284	Prohibits the smoking of tobacco on any aircraft engaged in interstate or overseas air transportation of passengers.	Referred to House Subcommittee on Aviation. Executive Comment Requested from DOT, OMB.

	S 1425, 1426	A bill to terminate certain functions of the CAB and to transfer certain functions of the Board to the Sec. of Transportation. The legislation would accelerate CAB's sunset and no consumer protection authority would be transferred to the DOT.	Referred to Senate Committee on Commerce, Science, and Transportation and to Subcommittee on Aviation. Hearings held 7/7/81. No floor action.
	S 1450	A bill to provide for the continued deregulation of the nation's airlines, and for other purposes. The measure, entitled the "Airline Deregulation Act Amendments of 1981" would repeal the section of the Federal Aviation Act viewed as the statutory basis for the CAB's authority to regulate smoking.	Referred to Senate Committee on Commerce, Science, and Transportation.
	S 1563 ²	Provides for designated "non-smoking" areas aboard aircraft. Directs the Sec. of Transportation to adopt rules providing for the special segregation of cigar and pipe smokers. Declares that nothing in this Act shall be construed to require an air carrier to permit smoking aboard aircraft. Prohibits smoking aboard aircraft whenever the ventilation system is not fully functioning.	Referred to Senate Committee on Commerce, Science, and Transportation.
98 th 1983-84	HR 3847	Prohibits smoking on aircraft carrying passengers in air transportation.	Referred to House Subcommittee on Aviation. Executive Comment Requested from DOT, OMB, CAB.
	HR 4395	Requires on board passenger-carrying aircraft: (1) no-smoking sections for each class of service (2) the prohibition of smoking cigars and pipes; and (3) the prohibition of smoking whenever an aircraft ventilation system is not operating at normal service. Would codify existing CAB regulations.	Referred to House Subcommittee on Aviation. Executive Comment Requested from CAB, DOT, OMB.
	HR 4955	Requires common carriers by air, rail, or motor vehicle to designate a portion of their seating capacity to nonsmoking passengers only.	Referred to House Subcommittees on Surface Transportation and Aviation. Executive Comment Requested from DOT, OMB.
	HR 6217	Prohibits smoking in more than one designated area of a passenger-carrying aircraft. Requires air carriers to provide a seat for any passenger who wishes to be seated in a no-smoking section.	Referred to House Subcommittee on Aviation.
99 th 1985-86	HR 133	Prohibits smoking in more than one designated area of a passenger-carrying aircraft. Requires air carriers to provide a seat for any passenger who wishes to be seated in a no-smoking section.	Referred to House Subcommittee on Aviation.
	HR 4924	Prohibits smoking on board passenger-carrying aircraft on flights of two hours or less and on flights where seating is not assigned.	Referred to Subcommittee on Aviation. Executive Comment Requested from DOT, OMB.
	HR 5661	Prohibits smoking on board passenger-carrying aircraft on domestic flights.	Referred to House Committee on Public Works and Transportation
100 th 1987-88	HR 432, HR 1078, HR 3377,	Prohibits smoking on board passenger-carrying aircraft on domestic flights.	Referred to House Subcommittee on Aviation. Hearings held Oct. 7, 1987.
	HR 2040	Prohibits smoking on board passenger-carrying aircraft on domestic and international flights.	Referred to House Subcommittee on Aviation. Hearings held Oct. 7, 1987. Executive Comment Requested from DOT, OMB.

	HR 3018	Prohibits smoking on flights of two hours or less and on flights where seating is not assigned.	Referred to House Subcommittee on Aviation. Hearings held Oct. 7, 1987.
	S 51	Prohibits smoking in public conveyances.	Referred to Senate Committee on Commerce, Science, and Transportation.
101 st 1989-90	HR 160	Make permanent the prohibition against smoking on scheduled flights of 2 hours or less in duration.	Referred to House Subcommittee on Aviation. Hearings held 6/22/89.
	HR 561	Prohibits smoking on domestic commercial aircraft flights.	Referred to House Subcommittee on Aviation. Hearings held 6/22/89.
	HR 598	Prohibits smoking on domestic commercial aircraft flights. Amended version of bill makes permanent the prohibition against smoking on scheduled flights of 2 hours of less in duration.	Referred to House Subcommittee on Aviation. Hearings held 6/22/89. 7/18/89: Committee consideration and mark-up session held. Approved for full Committee action. 7/28/89: House Committee on Public Works and Transportation Ordered Reported (Amended). 8/2/89: Reported in the House (H. Rept. 101-212).
	HR 817	Make permanent the prohibition against smoking on scheduled domestic flights of 2 hours or less in duration and to extend such prohibition to all scheduled domestic flights. Had phase in periods.	Referred to House Subcommittee on Aviation. Hearings held 6/22/89.
	HR 3528	Establish minimum standards for air carrier passenger services, to amend the Internal Revenue Code of 1986 to authorize appropriations, and for other purposes. Makes permanent the prohibition against smoking on schedule airline flights.	Referred to House Subcommittee on Aviation 11/6/89. Referred to House Committee on Ways and Means 10/25/89.
	S 519	Prohibits smoking on any scheduled airline flight in intrastate, interstate, or overseas air transportation.	Referred to Senate Committee on Commerce, Science and Transportation.
	S 655	Requires public conveyances to certify that the public is not involuntarily exposed to passive smoke and for other purposes.	Referred to Senate Committee on Labor and Human Resources.

¹Contents of the table derived from <http://thomas.loc.gov/>³⁷⁴

²Bold indicates ban on smoking

³Senator Matthias (R-Md) stated that he introduced S 1563 to codify the CAB's nonsmoking regulation. He expressed concern over the CAB's most recent proposal to not require airlines to accommodate nonsmokers who do not check in on time and that the Board might also relax the rule requiring the segregation of cigar and pipe smokers. Matthias stated that he was "putting the Board on notice that, should its revision affect adversely the interests of nonsmokers, he would press for the prompt consideration of his bill when Congress returned in September"²⁴⁴.

Table 3: Detailed Chronology of Airlines and Smoking 1967-1990

1967	National Interagency Council on Smoking and Health reports that commercial airlines in the US will no longer distribute complimentary cigarettes with meals in flight ³⁷¹ .
1969	
Dec	Ralph Nader petitions FAA and CAB to ban smoking on airlines as annoying, unhealthy for nonsmokers, and as a fire danger ³⁷⁵ . John Banzhaf and ASH file a petition with FAA seeking separate smoking and nonsmoking sections aboard aircraft ⁴³
1970	
March	FAA issues an advance notice of proposed rulemaking requesting public comment on whether smoking should be allowed aboard passenger-carrying aircraft. The agency's existing rules prohibited smoking only during takeoff and landing ⁴⁵
1971	
April	United Air Lines becomes the first major carrier to institute separate smoking and nonsmoking sections on its aircraft ³⁷¹ .
Dec.	A joint study conducted by FAA and NIOSH is released. The report concludes that inhalation of by-products from tobacco smoke aboard commercial aircraft does not represent a significant health hazard to nonsmoking passengers. "However, these low environmental contaminant levels do not indicate the degree of passenger annoyance from odor or irritation to the eye, nose, and throat from the smoking of other passengers in the aircraft as is indicated by the results of the passenger survey." ³⁴
1972	
Jan.	Surgeon General's report is the first to examine the potential harms resulting from involuntary exposure to tobacco smoke and concludes "It is high time to ban smoking from all confined public places such as restaurants, theaters, airplanes, trains, and buses." ⁹
Sept	CAB issues notice of proposed rulemaking to segregate smoking on passenger aircraft. If adopted, the proposed regulation would require (1) that the airlines set aside at the rear of each compartment of the aircraft a section to be designated as a smoking area and prohibit smoking in the remaining seats; (2) that the number of seats set aside as a "no smoking area" suffice to accommodate all persons who prefer not to be seated in proximity to passengers who smoke; and (3) that the airlines enforce their rules prohibiting smoking in nonsmoking areas ⁴⁸ .
1973	
May	CAB requires domestic airlines to provide designated "no smoking" areas aboard aircraft for reasons of consumer comfort and protection effective July 1, 1973. The provision requiring the smoking section to be placed at the rear of the aircraft is not adopted leaving the designation to each airlines' discretion ⁴⁹ .
July	FAA withdraws its Advance Notice of Proposed Rulemaking concerning segregation of smokers on commercial aircraft, stating that it "found no persuasive evidence that exposure to tobacco smoke, in concentrations likely to occur in transport aircraft (assuming normal ventilation rates), is injurious to the health of nonsmokers" ⁴⁷ .
1975	
Jan.	CAB notifies all US air carriers that their compliance with the smoking segregation rule has been less than satisfactory and calls on them to accommodate all non-smokers who desire to be segregated from smokers even if this requires infringing on the area reserved for smokers. The memo states, "Thus, in point of law, no passenger is guaranteed the right to smoke although a non-smoker is guaranteed the right to be adequately segregated from the smokers." ³⁷⁶
1976	
April	Airline Pilots Committee of 76, Public Citizen's Health Research Group, and the Aviation Consumer Action Project petition FAA to ban smoking in the cockpit and smoking by flight crewmembers before commercial flight operations ³⁷⁷ .
Oct.	Responding to an ASH petition to ban cigar and pipe smoking, CAB initiates a rulemaking proceeding on a wide range of smoking issues. In addition to comments on a ban of cigar and/or pipe smoking and amendments to provide more detailed guidance to carriers to enforce smoker segregation, CAB invites commentary on whether or not and under what circumstances there should be a total ban on all smoking by passengers on commercial aircraft ⁵¹ .
1977	
Aug.	FAA denies petition for rulemaking to prohibit smoking on the flight deck and by crew members for 8 hours prior to commencement of flight operations stating that the information submitted by the

petitioners to support their contention that smoking impairs performance “is too inconclusive to warrant the issuance of the requested rule at this time.”³⁷⁸

1978

Aug. HEW Sec. Califano writes to CAB urging a ban of all smoking on domestic commercial airlines³⁷⁹
Oct. Airline Deregulation Act (Public Law 95-504) is adopted. It amends the Federal Aviation Act of 1958 “to encourage, develop, and attain an air transportation system which relies on competitive market forces to determine the quality, variety, and price of air services”. It requires sunset of CAB January 1, 1985³⁸⁰.

1979

Jan. CAB modifies the 1973 rules, requiring airlines to specially segregate cigar and pipe smokers; ban smoking when the ventilation system is not fully functioning; ensure that nonsmokers are not unreasonably burdened when a no-smoking section is sandwiched between two smoking sections; provide a sufficient number of seats in the nonsmoking areas to be made available to accommodate all persons who wish to be seated in such rows; expand the nonsmoking areas to meet passenger demand; and that carriers must take measures to enforce these rules⁵². Docket 29044 is kept open for further comments.
May CAB invites comments on the following proposals: ban smoking on flights of 1 hr or less; ban smoking on small aircraft, ban cigar and pipe smoking; provide special seating arrangements for passengers unusually susceptible to tobacco smoke; require partitions or buffer zones between smoking and nonsmoking sections; and permit a waiver procedure for airlines that wish to experiment with ways of segregating smokers and nonsmokers⁵⁴. CAB applies smoking segregation rule to commuter airlines with a passenger capacity of more than 30³⁸¹.
June CAB proposes to expand the smoking segregation rule to cover all air taxis, including those providing on-demand service only³⁸².

1980

Jan. Two private citizens petition CAB to eliminate the smoking segregation rule aboard passenger aircraft.³⁸³
April CAB proposes limits on the obligation of non-smoking seats to passengers with confirmed reservations arriving at least 5 minutes before departure³⁸⁴.
Dec. CAB amends the smoking regulations to permit airlines to seek a waiver to allow experimentation with methods to separate smokers and nonsmokers effective December 17, 1980³⁸⁵. CAB modifies the exemption of air taxis to make clear that commuters using 30-seat or larger aircraft must comply with the smoking section rule³⁸⁶.

1981

Feb. In a supplemental notice of proposed rulemaking to its May 16, 1979 notice, CAB requests commentary on two more options: a ban on all in-flight smoking or an elimination of the regulation of smoking on passenger aircraft. CAB also invites commentary on the transfer of its rulemaking authority in this area⁵⁶.
May CAB holds a public hearing on the smoking rule⁵⁸.
Sept. CAB concludes the rulemaking begun in 1976 by dropping the 1979 modifications to the smoking rule. It revises the rule by requiring airlines to guarantee a seat in the no smoking section to every nonsmoker who meets the airline’s designated check-in deadline⁵⁸.
Oct. After CAB denies its request for a postponement of the effective date of the newly modified rule, ASH files a motion for a stay in a DC US Court of Appeals. Air Transport Association (ATA) and Transamerica intervene challenging CAB’s authority to regulate smoking.

1982

May Senate Subcommittee on Aviation holds a hearing to discuss airliner cabin safety and health standards and S. 1770. The bill, which would require the study of cabin air quality aboard passenger aircraft, does not make it out of committee. Little mention is made of tobacco smoke at the hearing³⁸.

1983

Jan. Court of Appeals issues its decision. It affirms CAB’s authority to regulate smoking on aircraft and requires the Board to reinstate the three provisions it had rescinded. The Court also remands for further proceedings CAB’s decision not to adopt proposals to ban smoking on short flights or small aircraft or to require special provisions for those passengers especially sensitive to smoke. The Court held that the Board had failed to adequately explain reasons for not taking any of these actions³⁸⁷.
May CAB reinstates two of the three provisions as ordered by the Court of Appeals: provide special segregation of cigar and pipe smokers and require carriers to prohibit smoking when ventilation

- systems are not fully functioning effective July 3, 1983. The requirement aimed at protecting passengers from drifting tobacco smoke is not readopted⁶².
- CAB reissues proposals to ban smoking on small aircraft; ban all pipe and cigar smoking; ban smoking when the ventilation system is inadequate; and to require airlines to provide special protections for especially sensitive passengers⁶³.
- June DC Circuit Court orders CAB to reinstate the third rescinded provision³⁸⁸.
- July CAB republishes the requirement that airlines ensure that if a no-smoking section is placed between two smoking sections, the nonsmokers are not unreasonably burdened effective September 9, 1983³⁸⁸.
- Sept. CAB issues supplemental proposals to ban smoking on short flights (1 or 2 hours) and to require additional special protections for those sensitive to smoke. CAB states that the questions of whether the smoking rule should be suspended or whether smoking should be banned on all flights had been decided in an earlier proceeding and are not at issue in this commentary⁶⁴.
- Nov. Senate Subcommittee on Aviation holds its second hearing to discuss airliner cabin safety and health standards and S. 197³⁹. There is some discussion of tobacco smoke yet no tobacco industry representatives appear to testify. Public health officials and flight attendants are in support of further study while the FAA, the airline industry and associations, and the airline pilots are not.
- 1984**
- Feb. CAB holds hearings on proposed rulemaking⁶⁵.
- June CAB adopts rules to ban smoking on small aircraft and to ban cigar and pipe smoking on all flights. CAB retains the current rule requiring fully functioning ventilation systems and discouraging airlines from sandwiching nonsmokers between two smoking sections. Proposals to ban smoking on short flights or to require special provisions for passengers especially sensitive to smoke are rejected⁶⁵.
- Oct. Public Law 98-466 is enacted (S. 197), requiring the FAA to contract with NAS for a literature review of studies on the airliner cabin environment⁴⁰.
- Public Law 98-443 amends the Federal Aviation Act of 1958 to terminate and transfer certain functions of CAB as of January 1, 1985. The statutory authority enabling CAB to promulgate rules governing smoking aboard airlines is transferred to DOT⁶⁶.
- Dec. WHO report on Smoking in Aircraft concludes that "Exposure to tobacco smoke in aircraft constitutes an important matter of health and well-being for an increasing number of airline passengers and it is, therefore, urgent that the problem be given continued and strengthened attention by pertinent international organizations, national aviation authorities, individual airlines, cabin crew, passengers, and scientists in related fields of research."³⁸⁹
- 1985**
- Jan. CAB sunsets.
- 1986**
- Aug. NAS issues its report *The Airliner Cabin Environment Air Quality and Safety* and calls for a total smoking ban on all domestic commercial flights for four major reasons: lessen discomfort to passengers and crew, reduce potential health hazards to cabin crewmembers from ETS, eliminate possible fires, and align cabin air quality with standards for other closed environments¹².
- Sept. Senate Subcommittee on Aviation holds a hearing to discuss the NAS airliner cabin report's findings and conclusions. The Tobacco Institute submits comments stating smoking does not constitute a fire hazard. It refutes the science supporting a smoking ban on aircraft and argues that issues of cabin air quality can be remedied with adequate ventilation. Experts hired by the industry make similar claims. ATA takes no stand on the medical basis of the recommendation to prohibit smoking on aircraft³⁹⁰.
- Dec. In separate reports, NRC of the NAS and the Surgeon General, both conclude that exposure to SHS is a cause of lung cancer and respiratory disease^{10, 11}.
- 1987**
- Feb. FAA presents NAS report to Congress along with DOT's comments. DOT cites a lack of scientific evidence in rejecting NAS's recommendation to ban smoking. The agency also calls for further empirical study.³⁹¹
- May Aerospace Medical Association at its 58th Annual Business Meeting recommends cessation of all smoking aboard commercial airliner flights³⁹².
- July House of Representatives passes (198-193) an amendment to the DOT appropriations bill banning smoking on flights of two hours or less. The amendment had been rejected in subcommittee and in the full Appropriations Committee, but the Rules Committee permitted the sponsor to offer it on the House floor⁶⁸.
- Sept. DOT requests permission to reprogram funds to conduct an empirical study of ETS on aircraft³⁹¹.
- Oct. House Aviation Subcommittee hears testimony on smoking aboard airliners¹⁵.
- Senate passes a compromise amendment to the DOT appropriations bill banning smoking on flights of 90 minutes or less for two years^{70, 393}.

- Dec. The conference committee on the Continuing Resolution agrees to a compromise provision banning smoking on flights of two hours or less for two years and a \$2000 fine for tampering with smoke detectors in airliner lavatories. The Continuing Resolution becomes Public Law 100-202 on December 22 and takes effect April 23, 1988³⁹⁴.
- 1988**
- April Smoking ban on flights of two hours or less goes into effect as per Public Law 100-202. Northwest Airlines voluntarily bans smoking on all its' North American flights³⁹³.
- 1989**
- Feb. A study published in JAMA and conducted by investigators at the NCI and the EPA finds that airline passengers seated in the non-smoking sections are exposed to nicotine levels comparable to passengers in the smoking sections of aircraft²⁸³. The study also finds that exposure to tobacco smoke is higher in newer aircraft as a consequence of ventilation systems that more efficiently recycle cabin air. As a consequence of these findings, Surgeon General Koop recommends that cigarette smoking be banned on all commercial flights.³⁹⁵
- June House Aviation Subcommittee hears testimony on smoking aboard airliners¹⁶.
- July House Aviation Subcommittee marks up the bill introduced by Chairman Oberstar, modifying it to extend for two years that current 2-hour ban. The bill is further amended in full committee to make permanent the 2-hour ban⁷⁴.
- Aug. House passes an amendment to the transportation appropriations bill that would make the current ban of smoking on commercial flights of two hours or less permanent⁷⁶.
- Sept. Senate adopts by voice vote the Lautenberg amendment to the transportation appropriations bill banning smoking on all domestic flights⁷¹.
- Oct. House-Senate Conferees on DOT appropriations bill agree to ban smoking on all passenger flights within the continental U.S. and all flights to Alaska and Hawaii lasting less than six hours. Prohibition includes foreign carriers operating between two points within US territory. House approves the appropriations bill and compromise proposal the last day of the month³⁹⁶.
- Nov. Senate passes the DOT appropriations bill with the provision to expand and extend the current airline smoking ban (Public Law 101-164). The bill is sent to the President for signature⁷¹.
- Dec. DOT submits its study of cabin air quality to Congress. Report states "consideration should be given to a total ban on smoking on all flights...as a means of eliminating the ETS risks currently faced by non-smoking passengers and non-smoking cabin crew members."³⁰¹
- 1990**
- Jan. Delta Air Lines announces it will extend the smoking ban scheduled to being February 25th to cover all of its service within North America³⁹⁷.
- Feb. Smoking ban on most scheduled US domestic flights goes into effect³⁷⁵.

Table 4: Statements from the Hearing before the House Subcommittee on Tobacco entitled “Effect of Smoking on Non-Smokers”, September 8, 1978²³⁷

<p>Edwin R. Fisher, M.D. Professor of Pathology, University of Pittsburgh, School of Medicine, and Director of Laboratories at the Shadyside Hospital</p>	<p>“My careful review of the literature, confirming the conclusions based upon my own experimental data and the related work discusses, reveals a lack of scientific information which would allow me to conclude that atmospheric tobacco smoke or its constituents represent a health hazard in non-smokers. Notwithstanding the scientific facts, there is a small group of vocal non-smokers who apparently have a special interest in trying to convince people that environmental tobacco smoke is harmful to their health.”</p> <p>“...I thinking Americans are in the grip of a new disease, a very serious disease – two diseases, as a matter of fact – manifestations are anxiety, fear, anger, resentment, and panic...The disease I am referring to is usually transmitted by misdirected efforts, the so-called consumer advocates, certain books, newspaper headlines, and so forth. Of course, the diseases I am speaking of are smokeaphobia and canceraphobia.”</p>
<p>Norman W. Heimstra, Ph.D. Professor of Psychology, Department of Psychology, University of South Dakota</p>	<p>“I think that in general terms we do have data now that would suggest that smoking does enable a person to cope more successfully with stressful situation.”</p> <p>“The point I am trying to make is while the right to smoke or not to smoke, I think is a right, and it shouldn’t be infringed upon by government or regulatory authorities, the point is that sometimes those who in good conscience feel that denying people the right to smoke is the proper thing to do, it might be counterproductive to those who want to smoke.”</p>
<p>Kenneth Moser, M.D. Professor of Medicine and Director of the Pulmonary Divisio , University of California, San Diego</p>	<p>“In caring for lots of patients with lung disease, I have encountered many who report increased symptoms in a smoke-filled environment. Such anecdotes, unfortunately, are not useful in settling this issue because many other factors can provoke symptoms – particularly the belief that cigarette smoke may cause problems, particularly when that belief is stimulated by the smell of tobacco smoke. Therefore, based on the available evidence, I must conclude that there is no proof that smoking in public places adversely affects patients with lung-disease either acutely or chronically. More research is needed in that area.”</p> <p>“We are talking on the public smoking issue, that is, your perception that something that somebody else is doing is going to hurt you. That is, I think is what the gut issue is here. If you are convinced that inhalation or alcohol fumes from the person next to you, or the loud popping noises that sometimes come from chewing [gum], or any of those things, are going to hurt you, you get a serious emotional response. The more you are convinced of that relationship, the stronger your emotional response and the stronger all these physiological responses I mentioned.”</p>
<p>Theodor D. Sterling, Ph.D. Professor, Faculty of Interdisciplinary Studies at Simon Fraser University</p>	<p>“First, contrary to popular belief, scientific evidence shows that the smoking of tobacco is a minor and often insignificant contributor to pollution. Elimination of that one source would not decrease pollutants present to any meaningful extent. Secondly, a rule restricting or elimination smoking would give the impression that effective measures had been taken when in fact no such measures would have been taken. Such a rule would serve only to divert attention away from the real sources of the problem. Thirdly, providing acceptable indoor air lies not in interfering with smokers but in effective ventilation practices.”</p>
<p>John Salvaggio, M.D. Henderson Professor of Medicine, Tulane University</p>	<p>“Contrary to claims about tobacco smoke allergy, in my judgment, it really has not at been clearly established that allergens for man are present in tobacco smoke. . .Furthermore, there has been a general lack of adequate clinical information on the individuals who claim to be bother by atmospheric tobacco smoke. As the other speakers have said, we certainly need a lot more research in this area.”</p>
<p>Suzanne B. Knoebel, M.D. Krannert Professor and Assistant Dean for Research Indiana University School of Medicine</p>	<p>“From my review of the pertinent animal and human data, I have to conclude that, one, it is not proven that atmospheric tobacco smoke has an etiological role in atherosclerosis in the nonsmokers; and, two, the rationale for mounting studies designed to demonstrate such a causal role in the human would be so weak as to be considered frivolous.”</p> <p>“My prediction would be that inhalation of tobacco smoke under realistic conditions will not provoke ischemia in patients with coronary artery disease at rest, particularly when the emotional impact of fear of tobacco smoke is removed.”</p>

	<p>“In conclusion, there are no indications that tobacco smoke in the atmosphere either causes or accelerates cardiovascular disease in the healthy nonsmoker. Nor do available studies establish that atmospheric tobacco smoker under realistic conditions adversely effects nonsmokers with pre-existent cardiovascular disease. However, more research is need in this area.”</p>
<p>Sherwin J. Feinhandler, Ph.D. in Cultural Anthropology Social Systems Analysis, Watertown, MA</p>	<p>“The smoker, with his visible smoke, is an easy target for venting frustration. In the minds of antismokers, the smoke may even be equated with physical assault. Convinced that their health is endangered, they feel the urge to fight back, often responding with aggressive, hostile acts.”</p> <p>“Antismoking groups have won over nonsmokers with talk of rights and health hazards and their concerted efforts to turn the tide of public opinion against the smoker. They have drawn government into the effort as well, and public smoking legislation is being enacted at the Federal, State, and local levels. Increasingly, legislation is being substituted for tolerance in the struggle to maintain individual freedoms.”</p>
<p>Walter M. Booker, Ph.D. Booker and Associates, Washington, D.C.</p>	<p>“As a scientist, I am interested in reliable data which demonstrate whether a nonsmokers absorbs tobacco smoke in public places, and if so, whether the amount is sufficient to cause adverse health effects. The literature, in my opinion, does not support the theory that a nonsmokers absorbs amounts which can cause harm.”</p>
<p>Reuben Cohen, President Response Analysis Corp., Princeton New Jersey</p>	<p>“We were asked by members of the U.S. tobacco industry to conduct a survey of the annoyances and irritations that are part of the everyday life of American adults...The total sample made over 4,000 mentions of various annoyances. A specific annoyance might, of course, be mentioned by many persons or by only a few. Of the total annoyances mentioned by the entire sample, only 2 percent related to smoking.”</p>

Table 5: Excerpts from written and oral testimony of the tobacco industry, 1976 through 1989

CAB rulemaking proceedings 1976-1979	CAB rulemaking proceedings 1979-1981	CAB rulemaking proceedings 1983-1984	Congressional legislation to ban smoking on short flights 1987	Congressional legislation to extend or expand smoking ban 1989
<p>“It may be true that smoking, even when regulated and confined to prevent interference with the legitimate expectations of nonsmokers, may annoy a few very sensitive or vocal persons. The minor annoyance those persons encounter is only one of many that all persons encounter in daily life. It cannot justify a sweeping regulation that would severely restrict the freedom of the large number of persons who enjoy smoking and establish a precedent that would inevitably force CAB to attempt to regulate other forms of passenger behavior” – <i>Tobacco Institute</i>³¹³</p> <p>“The thousands of persons who names are appended to this submission [tobacco industry-sponsored petition drive] not only disfavor further restrictions but support measures to make the treatment of smokers more equitable. These responses clearly demonstrate what The Tobacco Institute’s earlier comments stated: the principal support of the ASH petition and other efforts to impose new restrictions on smokers does not come from ordinary airline passengers. It comes instead from a relatively small but extremely and well-organized minority of antismoking advocates. The views of that minority, however sincere, should not outweigh the legitimate rights and interests of the great number of airline passengers who enjoy or do not object to smoking.” – <i>Tobacco Institute</i>³¹⁵</p>	<p>“If nonsmoking passengers have a ‘right’ to ‘adequate service’, enforceable by the Board, so do smoking passengers. The Board’s existing regulations already are heavily weight in favor of nonsmokers – nonsmokers are guaranteed seating in no-smoking sections, but smokers cannot be assured of seats in smoking sections” – <i>Tobacco Institute</i>³²⁰</p> <p>“Those [smoking] regulations are an unnecessary intrusion by government in the private behavior or airline passengers, and they have embroiled the CAB and the airlines in numerous unproductive and time-consuming administrative enforcement proceedings that are contrary to the congressional objective of deregulation. The question of smoking aboard airplanes—like other questions of passenger comfort and preference – should be left to the managerial discretion of the airlines, acting in response to the demands of their customers in a competitive market.” – <i>Tobacco Institute</i>³²²</p> <p>“...the opponents of in-flight smoking, in our view, have failed to put forward any persuasive scientific evidence that smoking poses a risk to the health of the nonsmoking passengers. The studies on which they rely, which are of uncertain validity in other contexts, are certainly irrelevant to conditions aboard airplanes. The position of those who oppose all smoking on airplanes is not substantiated by appropriate scientific evidence but is based on</p>	<p>“...there is no evidence, new or otherwise, to warrant these governmentally imposed encroachments upon the rights of passengers who enjoy smoking. Airline passengers themselves strongly oppose further regulation in this area. The anti-smoking lobby is a tiny, albeit vocal minority...The laws of market supply and demand, not CAB fiat, are the best way to maximize passenger welfare.” – <i>Tobacco Institute</i>³²⁴</p> <p>“In their recent comments to the Board, anti-smokers present no evidence for reversing these findings...The cited studies remain irrelevant to the Board’s deliberation...Even if the studies were valid, the conclusions presented by them obviously cannot be extrapolated to airplane flights of limited duration (generally a few hours), during which non-smoking passengers are separately seated in well-ventilated “no-smoking” sections.” – <i>Tobacco Institute</i>¹⁷³</p> <p>“But the truth of the matter is that a lot of smoking is done by blue collar workers, by people who are exposed to hazards in their work, and the workplace, who are exposed to hazards in the home...this is not so much as a problem of passive smoking, but one in which the total lifestyle of a family, including the kind of work done by the members of the family, are important.” <i>Tobacco Institute consultant, Theodor Sterling</i>²²¹.</p>	<p>“... we take the position that the present policy is fair. It has worked. It has generated very few complaints. Scientific surveys have demonstrated it has approval by the public ... over and over, the regulatory agencies have said that there is no evidence on which to justify rulemaking by us to change the present system. Safety: we have an excellent safety record with the present system. So we say, Mr. Chairman, that before we rush to judgment, let’s make the study that Secretary Dole has asked to be made and let’s reprogram the funds. Let’s go forward with that and really see what the situation is and end all that speculation.” - <i>Tobacco Institute</i>¹⁵</p> <p>“But even if the findings of the Surgeon General and NAS concerning health effects of chronic exposure to ETS were valid, they cannot reasonably be extrapolated to the airplane context.” – <i>Larry Holcomb, Holcomb Environmental Services</i>¹⁵</p> <p>“... it is recognized that air quality in the aircraft cabin is affected by many materials other than environmental tobacco smoke...Presently, the scientific literature contains surprisingly little concerning environmental tobacco smoke levels aboard aircraft. Additional studies will be required in order to truly understand the nature of air quality within aircraft cabins. The question of whether or not to regulate is only rationally answered if discussion is based</p>	<p>“Prudence dictates that Congress await the results of this ongoing study [DOT] before undertaking any legislative initiatives. Such legislation may well not be scientifically justified and, especially in the case of anti-smoking legislation, will likely not prove relevant to the broad objective of improving cabin air quality.”- <i>Tobacco Institute</i>¹⁶</p> <p>“Of course, if I am a non-smoker I like a non-smoking flight, and about 75 percent of the flying public are non-smokers, but the general public opinion survey civically conducted showed that a great majority of the Americans, and by the way, the percentages in the one that the Airline Pilots Association paid for [public opinion survey] and the one we paid for we are within a percentage point or two of each other.” - <i>Tobacco Institute</i>¹⁶</p> <p>“Tobacco smoke is the only pollutant that can be seen and smelled, making it a common suspect in passenger discomfort, an easy target for restrictions and scapegoat for the ubiquitous problem of poor indoor air quality. As we have seen, a smoking ban also is less expensive option for airlines that do not wish to improve ventilation, though on a per-passenger basis, the costs are minimal. However, the data demonstrate the importance of separating issues of comfort and economy from issues of science and health.” – <i>Gray Robertson, ACVA Atlantic Inc.</i>¹⁶</p>

	antidotal assertions.” - <i>Tobacco Institute</i> ²⁰⁷		upon data collected and analyzed in accordance with sound scientific principles and methods.” – <i>RJR Chemist William Crouse</i> ¹⁵	
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Table 6: Public opinion surveys regarding airline smoking from 1970 through 1989¹

Survey date	Question(s)	Results Percentage of respondents	Survey no. & population	Interview method	Organization conducting survey	Survey sponsor	Reference
1970	Some airlines have set aside a separate section of the 747 airplane for smokers and another where smoking is not allowed. Do you prefer this kind of separate seating sections or would you rather have smokers and non-smokers in the same section?	Prefer separate section 68.6 Prefer all together 16.9 Not sure 14.5	1511 National adult	Not reported	Louis Harris and Associates, Inc.	Not reported	³⁹⁸
1971	Do you think smoking in an aircraft should be permitted:	Only in certain areas 32 Not at all 6 As at present 55 Note that the percentage of smokers among military personnel was 57% versus 45 percent of the passengers on the domestic flights	3296 passengers on 20 military & 8 domestic flights 3043 were military personnel and/or their families	Self-administered	FAA/NIOSH	FAA/NIOSH	³⁴
1974	Favor separate sections on airplanes Favor ban on airplanes	Total 86 20 Smokers 79 12 Nonsmokers 90 25	2847 National adult	In person	Roper Org.	Tobacco Institute	³⁴⁴
1976	Smoking should be allowed only in the rear section of planes and long distance buses Smoking should be banned completely on all planes and long distance buses	1976 75 1974 77 1972 65 27 26 26* *Questions regarding the segregation of smoking on aircraft were incorporated for the first time in 1972. Interestingly, the 1970 Roper survey asked if "smoking should be banned on all planes and buses" with 52% agreeing with the statement. The question was not included on future surveys but modified as presented here.	Not reported National adult	In person	Roper Org.	Tobacco Institute	³⁴³
1977	In your opinion, which of the policies on this card should be followed with regard to smoking in such public places as trains, buses, airplanes,	There should be no restrictions 10 Special areas for smokers should be set aside 68 Smoking should not be allowed 16 No opinion 6	1507 National adult	In person	Gallup Org.	Not reported	³⁹⁹

	restaurants and offices?						
1977	Is the current method of providing separate airline seating for nonsmokers and smokers a satisfactory arrangement? Should the CAB completely prohibit: -all passengers smoking on all flights	Satisfactory 71.3 Nonsatisfactory 26.6 No response 2.1 Prohibit smoking 28.9 Don't prohibit 64.3 No response 6.8	10,000 responses from 32,000 domestic Airline Passenger Association members	Self-administered and mail in survey	Applied Management Institute	Airline Passengers Association ²	⁴⁰⁰
1978	Smoking should be permitted in trains, airplanes and buses? Should smoking be banned	In separate sections 91 Anywhere 7 Yes 16 No 75	Not reported National adult	In person	Roper Org.	Tobacco Institute	⁴⁰¹
1979	Bans versus restriction on smoking in public places	Ban smoking on airplanes 25 Restrict smoking on airplanes 64 Allow smoking on Airplanes 10 Don't know 1	Not reported National adult	Not reported	Yankelovich, Skelly and White Inc.	Tobacco Institute	⁴⁰²
1980	Bans versus restriction on smoking in public places	Ban smoking on airplanes 28 Restrict smoking on airplanes 63 Allow smoking on Airplanes 9 Don't know 0	Not reported National adult	Not reported	Yankelovich, Skelly and White Inc.	Tobacco Institute	⁴⁰²
1983	As you know, government regulations require separate seating sections on airplanes for smokers and non-smokers. Do you think this present arrangement works pretty well in making all passengers comfortable, or should this arrangement be changed in some way? And do you feel strongly about that? At this time the federal government is considering the elimination of smoking completely on airplanes with fewer than 60 seats. In your opinion, is this proposed regulation a necessary or an unnecessary restriction of smoking on airplanes? And do you feel strongly about that?	Present/strongly 54 Present 26 Unsure 4 Change 2 Change/strongly 13 Necessary/strongly 37 Necessary 13 Unsure 12 Unnecessary 14 Unnecessary/strongly 24	300 Pilot study conducted in two US cities	Telephone	Tarrance & Associates	Tobacco Institute	^{345, 346}

	Finally, one anti-smoking group is asking the government to prohibit all smoking on any size plane if the schedule flight time is two hours or less. In your opinion, is this proposed regulation a necessary or an unnecessary restriction of smoking on airplanes? If "Necessary", ask: and do you feel strongly about that? If "Unnecessary" ask: And would you oppose such a regulation? If "yes", ask: And do you feel strong about that?	Necessary/strongly 35 Necessary 11 Unsure 6 Unnecessary/no 17 Unnecessary/yes 9 Unnecessary/yes/strongly 21					
1983	As you know, government regulations require separate seating sections on airplanes for smokers and nonsmokers. Do you think this present arrangement works pretty well in making all passengers comfortable, or should this arrangement be changed in some way? And do you feel strongly about that?	Present/strongly 55 Present 28 Unsure 2 Change 3 Change/strongly 12	1000 air travelers National adult	Telephone	Tarrance & Associates	Tobacco Institute	¹⁰⁴
1983	The Civil Aeronautics Board has proposed that all smoking be banned on airline flights of one hour or less. Would this be your preference, would you object to this, or are you neutral?	Prefer 61.9 Object 13.6 Neutral 24.4	5502 air travelers at Hartsfield International Airport	In person	Georgia Lung Association	Georgia Lung Association	³⁴⁷
1984	I am going to read you a list of statements regarding smoking in public places. For each statement, I would like you to tell me whether you strongly approve, moderately approve, moderately disapprove or strongly disapprove of the statement... A ban on smoking on all airplane flights	Strongly approve Smokers 13 Nonsmokers 55 Strongly disapprove Smokers 46 Nonsmokers 6	99 smokers 101 nonsmokers National adult	Telephone	Marketing Research Services, Inc.	Philip Morris	³⁴⁸
1985	As you know, government regulations require separate seating sections on airplanes for smokers and non-smokers.	Present/strongly 62	1000 air travelers National adult	Telephone	Tarrance & Associates	Tobacco Institute	¹¹⁵

	Do you think this present arrangement works pretty well in making all passengers comfortable, or should this arrangement be change in someway?	Present 20 Unsure 2 Change 3 Change/strongly 13																																	
1987	Do you feel that cigarette smoking should or should not be allowed on commercial airline flights	Should be allowed 26 Should not be allowed 67 Not sure 7	1506 National adult	Telephone	Kane, Parsons & Associates	American Medical Association	³⁵¹																												
1987	Do you favor a ban of smoking on all commercial airlines?	Yes 64 No 28 No opinion 8	33,242 airline passengers at 89 airports in 39 states	In person	American Association for Respiratory Care	American Association for Respiratory Care	³⁵²																												
1987	Agree or disagree with the statement "Current practice of separating smoking and non-smoking passengers is a reasonable policy that respects the rights of each."	Agree 87 Disagree 12	1000 National Adult	Telephone	Hamilton, Frederick & Schneiders	Air Line Pilots Association and the Tobacco Institute	^{116, 211}																												
1987	Which best summarizes your views about smoking on aircraft? Ban on all flights Ban on flights up to 2 hrs. Divide cabin Have separate cabins Make no distinction Don't care	<table border="1"> <thead> <tr> <th></th> <th>All</th> <th>Smokers</th> <th>Nonsmokers</th> </tr> </thead> <tbody> <tr> <td>Ban on all flights</td> <td>48</td> <td>11</td> <td>56</td> </tr> <tr> <td>Ban on flights up to 2 hrs.</td> <td>12</td> <td>12</td> <td>12</td> </tr> <tr> <td>Divide cabin</td> <td>17</td> <td>36</td> <td>13</td> </tr> <tr> <td>Have separate cabins</td> <td>15</td> <td>22</td> <td>14</td> </tr> <tr> <td>Make no distinction</td> <td>2</td> <td>8</td> <td>1</td> </tr> <tr> <td>Don't care</td> <td>6</td> <td>11</td> <td>5</td> </tr> </tbody> </table>		All	Smokers	Nonsmokers	Ban on all flights	48	11	56	Ban on flights up to 2 hrs.	12	12	12	Divide cabin	17	36	13	Have separate cabins	15	22	14	Make no distinction	2	8	1	Don't care	6	11	5	7200 US airline travelers	Self-administered survey	International Foundation of Airline Passenger Associations	International Foundation of Airline Passenger Associations	³⁵⁰
	All	Smokers	Nonsmokers																																
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1989	There is presently a law that is in force for two years that bans smoking on flights of two hours or less. Do you approve of this ban? Would you favor legislation making this two-year ban a permanent ban? Do you think the ban should be extended to all flights, not just those of two hours or less?	<table border="1"> <thead> <tr> <th></th> <th>All</th> <th>Smokers</th> <th>Nonsmokers</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td>84.0</td> <td>58.1</td> <td>92.8</td> </tr> <tr> <td>No</td> <td>12.2</td> <td>36.5</td> <td>4.2</td> </tr> <tr> <td>Yes</td> <td>81.1</td> <td>51.7</td> <td>91.1</td> </tr> <tr> <td>No</td> <td>14.7</td> <td>43.0</td> <td>5.5</td> </tr> <tr> <td>Yes</td> <td>62.7</td> <td></td> <td></td> </tr> <tr> <td>No</td> <td>31.0</td> <td></td> <td></td> </tr> </tbody> </table>		All	Smokers	Nonsmokers	Yes	84.0	58.1	92.8	No	12.2	36.5	4.2	Yes	81.1	51.7	91.1	No	14.7	43.0	5.5	Yes	62.7			No	31.0			27,667 Adults polled at 66 airports in 33 states	In person	American Association for Respiratory Care	American Association for Respiratory Care	³³⁹
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¹ Surveys obtained through searches of tobacco industry document collections, LEXIS/NEXIS, and the Odum Institute

Figure 1: Examples of covert letter-writing requests

Lorillard Document, 12/72¹⁴³

Attached are five drafts of "letters" to the C.A.B. opposing the rule to require airlines to segregate smokers.

Could you get some of the agency people to write these -- by hand -- on non-company letterheads, using home addresses, and ask each one to get one or two more, similar, but not exactly the same.

Brown & Williamson Document, 10/76⁴⁰³

If you decide to write, you should use your own words and you will be writing as a private individual. For that reason, you should not use company stationery nor state that you are connected with B&W.

Philip Morris Document, 8/83⁴⁰⁴

IN PREPARING YOUR LETTER, PLEASE USE PLAIN PAPER OR PERSONAL LETTERHEAD AND A PLAIN ENVELOPE. DO NOT USE PHILIP MORRIS LETTERHEAD OR ENVELOPES.

Tobacco Action Network, 5/80⁴⁰⁵

Because you are expressing your own views, your letter should be on your personal stationery or plain paper bearing your home address -- not on business letterhead or with your business address!!

Committee for Airline Passengers Rights, a tobacco industry front group, 11/87

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WHAT CAN YOU DO? Join with other concerned New Jersey citizens on the Committee for Airline Passengers' Rights and let Senator Lautenberg know how you feel about the smoking ban. Exercise your rights as a citizen and write to Senator Lautenberg TODAY.

The Honorable Frank R. Lautenberg
United States Senate
717 Hart Senate Office Building
Washington, D.C. 20510

When you write, put one of the Airline Passengers' Rights stickers on the letter and envelope. Senator Lautenberg will know there is a strong group of New Jerseyans who disagree with his views on tobacco issues.

Figure 2: 1978 Lorillard document with excerpts of letters to the CAB written by industry friends in Congress ²⁵⁴

EXCERPTS OF HILL LETTERS TO CAB

"I seriously question the need or the propriety of the Federal government imposing further, more complicated restrictions. I am hard pressed to find any dramatic improvement for air travelers under these proposed regulations regardless of their disposition toward smoking."

Rep. Robert C. McEwen
30th District, New York

"I think that the regulations that are in effect now are satisfactory to both smokers and non-smokers. The rules that exist now seem to be working well, so therefore, there should be no need in changing these rules."

Rep. Robert A. Young
2nd District, Missouri

"The CAB's existing rules appear to be working well and provide comfort to smokers and non-smokers alike. Passengers who want to sit in a non-smoking area are guaranteed the right to do so and passengers seem to be satisfied with this arrangement...I respectfully submit my opposition to these new proposals."

Rep. Arlan Stangeland
7th District, Minnesota

"This is a needless additional proposal which infringes on the right of one group to travel in comfort simply because of the unreasonable demands of a small minority. Enough is enough... Further restrictions of smokers would be an infringement on their rights."

Rep. Bill Boner
5th District, Tennessee

"The existing system, in my opinion, works fine, provides protection and comfort for those who oppose smoking, while also providing an opportunity for those who desire to smoke. When you have a system that works, why wade in with new rules and regulations which impose on the freedom of many to supposedly protect the rights of a few."

Sen. Walter D. Huddleston
Kentucky

"The present rules are working well and are accomplishing their objectives. Passengers are free from exposure to smoking if they desire to be. Smokers generally have the opportunity to enjoy tobacco products. To resolve the small number of remaining problems, the CAB should rely upon the ability of airline personnel and the willingness of most smokers and non-smokers to be courteous."

Rep. Walter B. Jones
1st District, North Carolina

"I believe that the government bears some responsibility for public health and safety, but the current CAB requirements address those concerns adequately. Neither is the right to be left alone solely a right of non-smokers. The CAB cannot mandate restrictions to suit the wishes of a handful of non-smokers without infringing upon the rights of smokers."

Rep. Bill Hefner
8th District, North Carolina

"Hard facts and figures have not been offered to support the anti-tobacco lobby's contention that significant numbers of airline passengers are dissatisfied with the current regulations. Furthermore, the government should not issue new and encompassing regulations simply at the behest of the anti-tobacco zealots."

Rep. L.H. Fountain
2nd District, North Carolina

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Figure 3: Tobacco industry "talking points" against banning smoking on aircraft ^{244, 266}

**FACT
SHEET**

POINTS TO REMEMBER ABOUT

SMOKING ABOARD AIRCRAFT

Legislation to ban smoking on board commercial aircraft is unwarranted and inappropriate for many reasons. Among them:

. Smoking aboard aircraft is already sharply restricted; every passenger is guaranteed a "no-smoking" seat -- even if a smoking section must be reduced or eliminated to satisfy that guarantee.

. A 1987 Airline Pilots Association poll determined airline passengers, by a margin of 87% to 12%, believe that the "current practice of separating smoking and non-smoking passengers is a reasonable policy that respects the rights of each."

. The National Academy of Sciences said late last year that there's nothing in the scientific literature showing casual exposure to tobacco smoke in public places to be a health risk. That includes airplanes.

. Measurements of nicotine in aircraft cabins indicate that the amount of cigarette smoke in the nonsmoking section is so small that it would take the equivalent of 224 hours, or nine days of non-stop flying, for nonsmokers to be exposed to the "nicotine equivalent" of a single cigarette.

. A smoking ban would pose serious compliance problems, and significant administrative and practical problems for airlines and passengers alike.

. Some say aircraft smoking may present a "fire hazard" in the skies. But, according to National Transportation Safety Board records, since 1970, not a single airline fire has been determined to have been smoking related.

. The Airline Pilots Association is particularly concerned that smoking bans may create an on-board fire hazard, by encouraging surreptitious smoking, especially in lavatories.

. Federal aviation agencies have considered rules for smoking aboard aircraft for decades in nearly a dozen rulemakings. After exhaustive reviews, all proposals to ban smoking have been rejected.

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Figure 4: Text of a letter dated September 7, 1978 to the Chairman Kahn of the CAB from Rep. Jones (D-NC) ^{269, 270}

Dear Mr. Chairman:

Last week, on September 7, the Subcommittee on Tobacco of the Committee on Agriculture conducted a hearing on the effects of smoking on nonsmokers. The testimony presented at that hearing included much information that bears directly on the proposed revision of the regulations governing smoking aboard commercial aircraft now being considered by the Civil Aeronautics Board. I enclose a transcript of the hearing and commend it to your attention.

The expert testimony presented at the hearing reinforced the conclusion (with which the CAB concurred in its 1976 notice of proposed rulemaking in the smoking proceeding) that smoking aboard airplanes raises no legitimate public health questions. The Committee heard testimony from noted physicians who specialize in heart and artery disease, lung conditions, and immunology, all of whom concluded that ambient cigar, cigarette, or pipe smoke in the quantities encountered in normal circumstances (including conditions like those aboard aircraft) poses no threat to the health of nonsmokers.

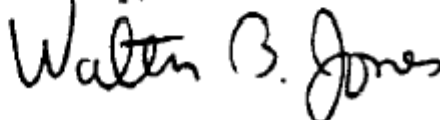
You may be especially interested in the testimony of two physicians (Drs. Fisher and Knoebel) and a pharmacologist (Dr. Booker). These witnesses reviewed the research by Dr. Aronow concerning the effects of passive smoking on persons suffering angina pectoris, a report of which was, I understand, recently transmitted to you by Secretary Califano. Each of these experts concluded that, because of methodological problems and other limitations, the Aronow study cannot properly be relied upon to prove anything about the actual effects of tobacco smoke on nonsmokers.

Other witnesses testified concerning the psychological effects of smoking bans on smokers, the sociological background of the anti-smoking movement, and the attitudes of ordinary persons concerning smoking in public. Their testimony clearly shows that public smoking is an issue of little concern to the overwhelming majority of ordinary Americans, including nonsmokers.

I think you will agree that the information developed at the September 7 hearing strongly supports a decision not to impose further restrictions on smoking aboard airplanes. The rights of millions of persons who wish to smoke should not be sacrificed merely to serve the interests of a relative handful of anti-smoking advocates.

With kindest regards, I am

Sincerely,



WALTER B. JONES
Member of Congress

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