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ALL THAT IS SOLID MELTS INTO AIR TRAVEL: ENVIRONMENTS, TECHNOLOGIES, AND THE MODERN NATION AT TRANS-CANADA AIR LINES

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BLAIR REBECCA STEIN
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ALL THAT IS SOLID MELTS INTO AIR TRAVEL: ENVIRONMENTS, TECHNOLOGIES, AND THE MODERN NATION AT TRANS-CANADA AIR LINES

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF HISTORY OF SCIENCE

BY

Dr. Hunter Heyck, Chair

Dr. Peter Barker

Dr. Edward Jones-Imhotep

Dr. Suzanne Moon

Dr. Peter Soppelsa

Dr. Kathleen Brosnan

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Abstract

This dissertation explores how Trans-Canada Air Lines (1937-1965) built, maintained, and subverted what I call the "modern envirotechnical nation" in its public-facing discourse. Euro-Canadian national identity in the nineteenth and twentieth centuries has been rooted in both the environment—Canada was imagined as very big and very cold—and communications technologies that allowed settlers to traverse long distances and transcend harsh climates. At first blush, these appear both contradictory and self-reinforcing. How can we, for example, celebrate Canada's size while at the same time technologically annihilating distance? Although clearly commensurate, environmental and technological nationalisms must *work* for that commensurability, especially in modern, high modern, and late/postmodern Canada. I refer to this work, as well as the discursive products of that work, the "modern envirotechnical nation."

I work mainly with the airline's public-facing material, including advertisements, publicity images, media reports, press releases, and speeches by executives and sympathetic politicians to explore this phenomenon. As a state airline, TCA was beholden to taxpayers and worked with government advertisers, which meant that it forwarded something of a state-sanctioned narrative of environment, technology, and nation and used its discourse to express larger anxieties about what it meant to be a modern Canadian. TCA worked throughout its first two decades to maintain the modern Canadian envirotechnical nation in this material. Ultimately, it was unable to reconcile the role of air travel in creating new relationships between space, place, time, and the everyday experience of mobility with this paradigm as high-powered jets took Canadians faster and farther than the "modern envirotechnical nation" would allow.

I treat air travel in Canada as a high-modern megaproject, a state enterprise designed to forward collective visions of nature, technology, and nation through the implementation of large-scale infrastructure. Therefore, this dissertation brings together the historical study of modernity, business, and the relatively new field of "envirotech." Bridging environmental history and the history of technology, "envirotech" sits at the nexus of nature, culture, technology, and power, allowing for a multivalent analysis of technological systems as mediators for human experiences with their environments. I push the boundaries of "envirotech" by interrogating the role of technology in changing *perceptions* of the environment; TCA's public-facing articulations of the "modern envirotechnical nation" represented Canadian environments not just how they were, but how it ought to and appeared to be to the airline's passengers.

Introduction: The Modern Envirotechnical Nation

"I thought to myself—what an age—what would the Fathers of Confederation say. Here they are, the two symbols of this age of speed—the babies of the twentieth century—up in the clouds the Airways of TCA—below the Airwaves of CBC—both working like giant needles, knitting this country together...bringing Moose Jaw alongside Moncton...Victoria next to Vercheres...Edmonton with Edmundston...closing the gaps which worried the Fathers."[1]

"You asked for it. Today's flight from Edmonton to Vancouver was so blame cold...62 degrees is not fit for man or beast. On the other hand, it apparently was OK for the Canadians (no slur intended)...The least you could do would be warn us [Americans] of your frigid intentions, so we could prepare for the ordeal. Other than that, the flight was fine. You have excellent pilots and capable Stewardesses (but probably cold-hearted)."[2]

These two descriptions of flying Trans-Canada Air Lines (TCA, now Air Canada) strike at two different aspects of the Canadian flying experience. The first, by Canadian Broadcasting Corporation human interest reporter John Fisher, imagines air travel as a tool of nation-building, knitting the Canadian nation together and solving some of the foundational issues of existing at the edge of geographic possibility that had been plaguing settler Canadians since the nineteenth century. The other, by an anonymous American passenger nicknamed "Warm-Blooded" in TCA's employee newsletter, sees air travel as a rather more concrete experience informed by both his personal comfort level and stereotypes about Canadian affinity for the cold. What can these two experiences, each of which happened on board the same type of aircraft, the Canadair DC-4M North Star, tell us about the role aircraft, airlines, and the experience of air travel played

[1] "John Fisher Reports: Up and Down" (script), 2 May 1948, Air Canada fonds, RG-70, vol. 254, Library and Archives Canada (hereafter LAC).
[2] "What Others Think of Us—Warm-Blooded," *Between Ourselves* January 1953, 3.

in expressing what it meant to be a certain kind of Canadian in the twentieth century? This project engages with this question, and the main concerns of both John Fisher and "Warm-Blooded," by analyzing TCA's discursive role in the creation, maintenance, and dismantling of some of the foundations of settler Canadian national identity: geography, climate, and communications technologies. Fisher's unabashed technological patriotism—he called his scripts "pride-builders"—and "Warm-Blooded's" sarcastic comments that Canadian stewardesses were "cold-hearted" each speak to the work necessary to sustain the scaffolding of national identity through the destabilizing tendencies of technological high-modernity.

They also point to two related threads of settler Canadian national identity. The first, what I refer to as "environmental" nationalism, has its roots in Victorian-era science. It connects the fundamental nature of settler Canadians to the land on which they have chosen to settle. That is, *Canada itself* was used as a way to carve out a diasporic identity separate from the metropole in Europe as well as other Anglo diasporas such as the United States. Canada's massive size and difficult climate especially became parts of this founding myth; Canada was imagined as an unlimited land with unlimited resources that could only be truly appreciated and properly managed by the hardiest settlers, despite the fact that settler Canadians only occupy a small portion of the territory. Of course, unlimited land came with its own set of challenges, and the settler responses to those challenges gave rise to the other thread of Canadian national identity. Generally called "technological nationalism" in Canadian communications theory, its lineage is usually traced to the rail and telecommunications infrastructures built in Canada through the nineteenth and early twentieth centuries—both of which are considered *communications* in Canadian scholarship. Technological nationalism is a particularly Canadian version of what David Nye might call a "technological creation story," in which long-distance communications

infrastructure was a necessary part of literal and discursive nation-building. A centralized Canadian nation could only be possible, and could only be sustained through the twentieth century, with a network of long-distance transportation and communication in place.

At first blush, these two sorts of Canadian nationalisms are contradictory and self-reinforcing. How can we celebrate Canada's size while at the same time seeking to annihilate distance, or at least make it irrelevant, using modern communications technologies? How can the Canadian culture of bigness exist without a way to communicate and subsequently homogenize that bigness, turning a variable nation into a single "big" Canada? Although clearly commensurate with one another, environmental and technological nationalisms have to *work* for that commensurability, especially in modern, high modern, and late/postmodern Canada. I call this work, and the discursive products of the work, the "modern envirotechnical nation." I imagine this as an extension of what Sheila Jasanoff and Sang-Hyun Kim have referred to as the "sociotechnical imaginary": "collectively imagined forms of social life and social order reflected in the design and fulfillment of nation-specific scientific and/or technology projects."[3] They are especially concerned with the role of the state in the development and dissemination of these imaginaries as a sort of aspirational version of a national "technological style."[4] Imagination,

[3] Sheila Jasanoff and Sang-Hyun Kim, "Containing the Atom: Sociotechnical Imaginaries and Nuclear Power in the United States and South Korea," *Minerva* 47 (2009): 120. See also Jasanoff and Kim, "Sociotechnical Imaginaries and National Energy Policies," *Science as Culture* 22:2 (2013): 189-196; Jasanoff and Kim, eds., *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power* (Chicago: University of Chicago Press, 2015), especially 1-33.

[4] "Technological style" is attributed to Thomas Hughes, "The Evolution of Large Technological Systems," in *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, ed. Wiebe Bijker, Thomas Hughes, and Trevor Pinch (Cambridge: MIT Press, 1987), 68-71. For a textbook application of "technological style" to the nation-state, see Gabrielle Hecht, *The Radiance of France: Nuclear Power and National Identity after World War II* (Cambridge: MIT Press, 2009), 3-4.

they argue, is part of the Andersonian sense of belonging in a community, and *sociotechnical* imagination appears not necessarily in the minds of inventors, engineers, and the like, but instead inside the policies, hierarchies, and physical structures of the technological systems themselves.[5] These, in turn are intimately tied to "what is good or desirable in the social world writ large—for instance, how science and technology can meet public needs and who even are the relevant publics," transforming technological aspirations into "collective visions of the good society."[6]

This is a particularly useful analytic for this project, as it combines what Jasanoff has called "performances of statehood in modernity" with the everyday practices of techno-science; advertising and engineering are equally part of the construction of the imagined sociotechnical nation.[7] It also remains ripe for discussion inside *specific* national contexts, especially since Jasanoff and Kim use cross-national comparisons as a way to develop the term. Techno-nationalism, as David Edgerton calls the assumption that "the key unit of analysis for the study of technology is the nation," takes on new nuance and texture when the everyday experiences of engineering, for example, are braided into stories of large state technological projects.[8] The

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[5] Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 1983); Eric Hobsbawm, "Inventing Traditions," in *The Invention of Tradition*, eds. Eric Hobsbawm and Terence Ranger (Cambridge: Cambridge University Press, 1983), 1-14.

[6] Jasanoff and Kim, "Containing the Atom," 122-123.

[7] Jasanoff, "Future Imperfect: Science, Technology, and Imaginations of Modernity," in Jasanoff and Kim, eds., *Dreamscapes of Modernity*, 10.

[8] David Edgerton, "The Contradictions of Techno-Nationalism and Techno-Globalism: A Historical Perspective," *New Global Studies* 1:1 (2007): 1. See also Edgerton, *The Shock of the Old: Technology and Global History Since 1900* (Oxford: Oxford University Press, 2007), 103-137. For some specific "techno-nationalism" studies that engage with "national styles" in engineering, see also John K. Brown, "Design Plans, Working Drawings, National Styles: Engineering Practice in Great Britain and the United States, 1775-1945," *Technology and Culture* 41:2 (2000): 195-238; Mikael Hard and Andreas Knie. "The Grammar of Technology: German and French Diesel Engineering, 1920-1940," *Technology and Culture* 40, no. 1 (1999): 26-46; Eda Kranakis, *Constructing a Bridge: An Exploration of Engineering Culture, Design, and Research in Nineteenth-Century France and America* (Cambridge: MIT Press, 1997).

"collective visions" are borne out at the individual level; the place-based knowledge of engineers, policy-makers, laborers, and even the users of the system both reflect collective visions of technological style and are reflected back on to them.[9]

The specificities of *place* are what give these sociotechnical imaginaries their particular national textures, and I therefore add to the study of the sociotechnical imaginary the tools and methodologies of the study of the environment. Aspirational as they may be, sociotechnical imaginaries must remain grounded in geography in order for those imaginaries to be enacted and to have resonance. The "modern envirotechnical nation" is an expression of *place*: what makes Canada Canada and what makes Canadian-ness unique. Although Canada is not the only nation with a pronounced envirotechnical imagination, the way that geography and communications undergird the settler nation-state's foundational principles mean that envirotechnicality echoes throughout a variety of expressions of national belonging.[10]

This project examines the work required to support the particular sociotechnical imaginary embedded in Canadian geography and climate as the everyday experiences of modernity revealed its interpretive inflexibility. Commercial air travel was the first major test of Canada as an envirotechnical construct, as Canada as a centralized settler nation-state was still relatively new when Trans-Canada Air Lines first began operations.[11] I situate this test firmly in

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[9] In her work on the early modern construction of the Canal du Midi in France, for example, Chandra Mukerji shows that classical construction techniques that the state used to support the idea of France as a "new Rome" and the French as "new Romans" were actually passed down through the lived experiences of peasant woman laborers in the Pyrenees. *Impossible Engineering: Technology and Territoriality on the Canal du Midi* (Princeton: Princeton University Press, 2009), 117-153.

[10] I would point to other large nations that use singular environmental characteristics as part of their national identity despite geographic and climatic variation, such as Australia and its aridity and wildlife and Brazil's rainforests.

[11] TCA's first flight, in September 1937, was two months after the 70th anniversary of Confederation; Alberta and Saskatchewan had entered Confederation only 32 years prior. One

the experience of modernity, especially as everyday Canadians felt the effects of time-space compression beyond technological nationalism's darlings such as rail, telegraphy, and broadcasting. Aviation, of course, took people higher, farther, and faster than rail and removed the embodied feeling of traversing the land. This relatively extreme compression of time and space was increasingly more difficult to reconcile inside the Canadian socio- and enviro-technical imaginaries, built as they were on a specific set of compressive technologies. As a state airline and the most visible source of Canadian aviation rhetoric in the middle decades of the twentieth century, TCA sat poised at the center of these elastic expressions of envirotechnicality, relying on, modifying, or rejecting them as the need arose, and eventually revealing when they had stretched too thin.

TCA's public-facing discourse can therefore tell us a great deal about the modern Canadian experiences of time and space. In this project, I highlight in particular a shift in the meanings assigned to "time" and "space" and the ways in which they were situated in envirotechnical understandings of Canada and Canadians. The particularities of Canadian modernity and high modernity changed the meanings of "time" and "space." To paraphrase Marshall Berman paraphrasing Karl Marx, all that was solid about Canadian place—its bigness, its coldness, its celebration of communications infrastructure—melted into airspace and airwaves and airplanes as modern technologies continually disrupted, renewed, created, and contradicted the particular versions of "time" and "space" that were foundational to the expression of the modern Canadian envirotechnical nation.[12]

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other province (Newfoundland and Labrador, 1949), and one other territory (Nunavut, 1998), would join Confederation later in the twentieth century.

[12] Marshall Berman, *All That is Solid Melts into Air: The Experience of Modernity* (New York: Penguin, 1988), 15. In Chapter 4, I point to the idea that this generated anti-modernisms in Canada as well, especially as they pertained to "Canadian values," tourism, and nostalgia. See

This project uses the public-facing material developed by TCA as a way to explore these modern relationships between "space," "place," "time," the environment, and techno-science, especially in terms of how state agencies used the discourse of national identity to stake a claim to belonging. TCA was what is known in Canada and other Commonwealth nations as a Crown corporation, run as a private business with arms-length oversight and financial support from the federal government. This is therefore also a story about business and government and how state enterprises imagine their duty to the nation. Crown corporations were a "distinctively Canadian" way to handle "the social and economic questions which arise in the process of exploiting the resources of our half of the continent," historian and essayist Frank Underhill wrote in 1929, because it showed that in Canada, at least compared to the United States, "we are still capable of using our political machinery for constructive purposes."[13] Crown corporations were what historian Matthew Bellamy calls an "increasingly energetic force in the Canadian marketplace" in the decades after Underhill's comments; political scientists and economists imagined them as a progressive fusion of the competitive private sector and benevolent liberal governments, and Liberal leaders used them to relieve the economic pressures of the Great Depression and Second World War.[14] Although they differed in structure and organization and their accountability to the government varied, Crown corporations in the 1930s and 1940s are generally considered a response to the failures of laissez-faire capitalism during the Depression and the emergence of

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Alan Gordon, *Time Travel: Tourism and the Rise of the Living History Museum in Mid-Twentieth-Century Canada* (Vancouver: University of British Columbia Press, 2016); Ian McKay, *The Quest of the Folk: Antimodernism and Cultural Selection in Twentieth-Century Nova Scotia* (Montreal and Kingston: McGill-Queen's University Press, 1994).

[13] Frank H. Underhill, "O Canada, Our Land of Crown Corporations," in H. D. Forbes, ed., *Canadian Political Thought* (Toronto: Oxford University Press, 1985), 228-229.

[14] Matthew J. Bellamy, *Profiting the Crown: Canada's Polymer Corporation, 1942-1990* (Montreal and Kingston: McGill-Queen's University Press, 2005), xv. The federal Liberal Party was in power in Canada for almost the entire temporal scope of this project: 1935-1957.

the Canadian welfare state.[15] Crown corporations, as I will show in this project, also allowed for what appeared to be a state-sanctioned version of public works such as communications, broadcasting, and transportation. Support from the state and taxpayers meant at least an implicit endorsement by the state of the form, function, and purpose of these infrastructures, many of which emerged from the challenges of modern Canadian life and the threats, imagined and real, of American private-sector encroachment. In the areas of wheat marketing (Canadian Wheat Board, 1935), broadcasting (Canadian Radio Broadcasting Commission, 1932, later Canadian Broadcasting Corporation, 1936), central banking (Bank of Canada, 1934), and air transport (TCA, 1937), for example, "the choice was clear: it was the state or the United States."[16]

In his work on the Crown corporation Polymer Corporation, Bellamy suggests that this propensity towards public enterprise may be due to geography, since the nation's large size and scattered population centers required active centralized interventions on economic development to avoid unwanted outside influence, but it was also a symptom of a particular historical moment. The Crown corporation was a useful mechanism—Harold Innis called it an "effective weapon" in the early 1930s—to alleviate the economic anxieties of the Depression, mobilize resources during the war, and facilitate a return to normalcy in peacetime.[17] It was in the Depression in particular that the federal government began to "experiment extensively" with Crown corporations, many of which were overseen by engineer-turned-politician Clarence Decatur "C.D." Howe.[18] Howe is worth discussing briefly here in his role not only as the

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[15] For a summary of this, see Joe Martin, ed., *Relentless Change: A Casebook for the Study of Canadian Business History* (Toronto: University of Toronto Press, 2010), 80-81.
[16] Bellamy, *Profiting the Crown*, 34.
[17] Innis referred to it as a "clumsy, awkward means" of co-ordinating massive amounts of desirable natural resources in a young country with "retarded development" due to its age. Harold Innis, *Problems of Staple Production in Canada* (Toronto: Ryerson Press, 1933), 80.
[18] Bellamy, *Profiting the Crown*, 33.

Minister responsible for founding TCA in 1937, but also in his role as the airline's greatest champion in Parliament.[19]

Known colloquially in Canadian political circles as the "minister of everything," Howe was first elected to federal Parliament in 1935 and held the Cabinet portfolios of Railways and Canals, Transport, Munitions and Supply, Reconstruction, and Trade and Commerce at various times until his defeat in 1957. Because of his engineering background, Robert Bothwell and William Kilbourn have pointed out in their rather hagiographical biography of Howe, he was more interested in making government "work" than any particular ideology: "he was neither Liberal nor liberal...Government interference in the economy, centralized power and drastic administrative solutions held no terrors for him. To a degree he remained blithely unaware that such things might be a problem for anyone."[20] Historian Don Nerbas has recently shown that this characterization—common across many studies of Howe—is overly simplistic, but it still suggests that Howe's view of what governments were supposed to do for their constituents was supported by the logic of the engineering profession.[21] Howe's new liberal managerialism, as Nerbas has called it, was "more state-centric in its operation, and more continental in its geographic orientation" than previous models; his deployment of Crown corporations was more pragmatic than ideological, using public enterprise to overcome the barriers of Canadian

[19] He kept TCA in his ministerial portfolio despite being the Minister of Transportation, Munitions, and Reconstruction at various points in his career.
[20] Robert Bothwell and William Kilbourn. *C. D. Howe: A Biography* (Toronto: McClelland and Stewart, 1979), 66. It's particularly telling that the chapter of Michael Bliss's massive *Northern Enterprise: Five Centuries of Canadian Business* (Toronto: McClelland and Stewart, 1987) about Howe is called "Visible Hand: The Years of C. D. Howe."
[21] Don Nerbas, *Dominion of Capital: The Politics of Big Business and the Crisis of the Canadian Bourgeoisie, 1914-1947* (Toronto: University of Toronto Press, 2013), 202. See 200-241 for his account of Howe's engineering management style and Canadian big business.

geography, culture, and economic markets.[22] That is, Howe's Crown corporations were designed to stimulate and accelerate areas of the economy neglected by private business and support the private sector by "providing services, raw materials, and technology that would not otherwise be available."[23] During the war, these took the form of research and resource development outfits such as Research Enterprises, Ltd (1940) to hasten the development of radar and optical instruments and the Polymer Corporation (1942) to make synthetic rubber. Before the war, however, Howe's "Crowns," as they were occasionally lovingly called, were instead oriented towards the structural problems of circulating goods, people, and ideas across the expanse of Canadian geography in the face of competitive American enterprise.

What Is (High)Modernity?

TCA was one such Crown corporation grounded in a newly emerging set of assumptions about Canadian land, Canadian technological networks, and the Canadian state. Part of a larger suite of communications-related Crown corporations and federal enterprises in the 1930s, such as the ones mentioned above and the National Film Board of Canada (1939), TCA represented a distinctly modern relationship between communications, business, and the state.[24] As I will show in this project, it suggested that state control at least *appeared* necessary to build a united Canada

[22] Nerbas, *Dominion of Capital*, 203. Nerbas suggests that this was perhaps because Howe was American by birth and therefore did not have the same attachments to British markets and British economic models that others might.
[23] Bellamy, *Profiting the Crown*, 34.
[24] Although a government agency rather than a Crown corporation, the NFB was often considered part of the suite of Canadian state-owned communications networks. I would also suggest that the wave of new culture-related Crown corporations around the end of this study such as the Canada Council for the Arts (1957), the National Arts Center (1967), and the National Museums of Corporation (1967), represent a new struggle to codify a sort of modern Canadian national culture.

in terms of both physical connections and a singular national settler imagination; state intervention could both thwart a potential takeover by American free market forces *and* create a Canadian culture of business and technology. Therefore, the story of TCA, its relationship to the state, and its role in articulating nationalistic visions of environments and technologies is by definition a high-modern story. In this dissertation, I use both "modern" and "high-modern" to describe the process by which TCA built, maintained, and destabilized the Canadian envirotechnical identity. Here I refer to "modern" as a cultural category and "high-modern" as a political and temporal category, inspired by James Scott's *Seeing Like a State*. Scott places high modernity in the middle part of the twentieth century and associates it with "megaproject" regimes: centralized state constructions of science and technology as a solution for society's ills and the imposition of large techno-scientific projects onto an oftentimes unaware or uncooperative populace.[25] Modern centralized governments relied on science and technology as stand-ins for state power and catch-alls for national belonging. In the process, state agents made use of modern technological rhetoric, emphasizing human triumphs over space and time, mobility, speed, and choice as "modern" technologies intruded into everyday life. This language of "modernity" is usually rooted in the Second Industrial Revolution; in this context, it creates a discursive lineage between relatively individualistic "modern" technologies and centralized "high-modern" megaproject regimes. That is, "high-modern" large-scale megaprojects required the discourse of modernity to fit into constructions of technology, identity, and what national governments owed their citizens.

[25] James Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998).

In her work on nuclear power in France, Gabrielle Hecht argues that postwar technological projects became staging grounds for anxieties concerning the political and social processes of modernization. By clinging to a "national technological style" associated with history, language, and aesthetics, centralized megaprojects could perform "the double operation of legitimating technology as an expression of national identity and preserving...[national] uniqueness" through the complexities of modernization.[26] Large technological systems, such as the nuclear infrastructure at the heart of Hecht's study, are modernity embodied, enacted, and contested, all at a single site. Other scholars have suggested that in Europe, the re-construction of urban infrastructures, as well as the construction of postwar systems such as automobile highways, were part of this re-evaluation of landscape and memory.[27] In these modern "sociotechnical imaginaries" there was a tension between looking backward and forward, celebrating a nationalist past and universalist techno-scientific future. State actors sought technological initiatives that would establish geopolitical power while still maintaining some sort of place-based national character.

Mid-century Canada saw its fair share of megaprojects imbued with these types of meanings, as Daniel Macfarlane, Tina Loo, and Joy Parr have shown.[28] For example, just as

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[26] Gabrielle Hecht, *The Radiance of France*, 52.
[27] Virag Molnar, *Building the State: Architecture, politics, and State Formation in Post-War Central Europe* (New York: Routledge, 2013); Lino Camprubí, *Engineers and the Making of the Francoist Regime* (Cambridge, MIT Press, 2014); Sara Pritchard, *Confluence: The Nature of Technology and the Remaking of the Rhône* (Cambridge: Harvard University Press, 2011).
[28] Daniel Macfarlane, *Negotiating a River: Canada, the US, and the Creation of the St. Lawrence Seaway* (Vancouver: UBC Press, 2014); Tina Loo, "People in the Way: Environment, Modernity, and Society on the Arrow Lakes," *BC Studies* 142:3 (2004): 161-196; Joy Parr, *Sensing Changes: Technologies, Environments, and the Everyday, 1953-2003* (Vancouver: UBC Press, 2010). For a concise summary of recent works on high-modernism in Canada, see Edward Jones-Imhotep and Tina Adcock, eds., *Made Modern: Science and Technology in Canadian History* (Vancouver: UBC Press, 2018), 10-12.

France self-fashioned as a nuclear nation, Canada identified with one brand of energy: hydroelectricity.[29] Of the 613 large dams built in Canada to 1984, nearly 60 per cent were built between 1945 and 1975, and perhaps the most visible of these was the Great Lakes-St. Lawrence Seaway, constructed between 1954 and 1959.[30] As Daniel Macfarlane argues, the St. Lawrence River has been "the leading protagonist" in physical and cultural nation-building, "often acting as synecdoche for Canada"; a megaproject designed to change the river's shape and use must necessarily be part of the national imagination.[31] Megaprojects such as these are intensive interventions on a local site or sites, but they also become symbols in the outward knitting-together of modern nationalisms. In the case of the Seaway, making "wild" nature useful through brute technological strength was a continuation of Canadian nation-building storytelling, but also appeared to be the absolute measure of modern statecraft as represented in the massive scale of the system.[32] Macfarlane identifies what he calls "*negotiated* high modernism," which takes into account the smaller-scale political and social negotiations of high-modern megaprojects. He suggests that this is a distinctly Canadian type of high modernism, especially because of how the Seaway became a "lightning rod" for different Canadian nationalisms.[33]

These small negotiations emphasize the ways in which these types of projects are rooted in place and materiality, and, as Joy Parr has argued, involved the sometimes forced re-

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[29] "Hydro" has become a colloquialism for "electricity" in both English and French-speaking Canada. For more on hydro in Canada, see Matthew Evenden, *Allied Power: Mobilizing Hydro-electricity During Canada's Second World War* (Toronto: University of Toronto Press, 2015); Caroline Desbiens, *Power from the North: Territory, Identity, and the Culture of Hydroelectricity in Québec* (Vancouver: UBC Press, 2013); Christopher Armstrong and H. V. Nelles, *Wilderness and Waterpower: How Banff National Park Became a Hydro-Electric Storage Reservoir* (Calgary: University of Calgary Press, 2013).
[30] Tina Loo, "People in the Way," 165.
[31] Macfarlane, *Negotiating a River*, 14.
[32] Sara Pritchard argues something similar for the Rhône in France in *Confluence*.
[33] Macfarlane, *Negotiating a River*, 17-18; 228-229.

structuring of the everyday sensory experiences of local people.[34] The "unquestioned priorities of modern statecraft," such as dams and military bases, did not include people interacting with those systems.[35] Scholars' attentions to both the large environmental impact and smaller sensory impact on lived experiences indicate that there are different types of modern megaprojects. Although not entirely mutually exclusive, some involve an intensive top-down transformation of a single site or sites, while others build on national imaginaries and everyday experiences as embodied by technological systems. Air travel is a high-modern project of this second variety. Air travel has had relatively little impact on the physical landscape, even after taking the modern airport in account. Instead, it provided Canadians with a new way of seeing themselves and their country. Scott has suggested that "it would be hard to exaggerate the importance of the airplane for modernist thought and planning"; making the landscape legible was easiest from the "God's-eye view."[36] Canada's size was a real obstacle to building a vision of a united, single country, and accessible air travel could add the "passenger's-eye-view" to the "God's-eye-view." I show in Chapter 1, for example, that TCA leaned heavily on this construction, working with older imaginaries of "bush flying" and aerial mapping to frame looking out of its aircraft's windows as an authentic Canadian envirotechnical experience. My work on TCA therefore expands on the pre-existing version of Canadian high modernism by emphasizing the delicate and deliberate work necessary to turn air travel into what Macfarlane calls a techno-political "lightning rod" in his work on the Seaway. The high-modern "negotiations" at TCA did not result in a radical

[34] Take, for example, the 6,500 Ontarians displaced from what are now called the "Lost Villages" for the construction of the Seaway. Macfarlane, *Negotiating a River*, 149-178 and Joy Parr, *Sensing Changes*, 79-102.
[35] Parr, *Sensing Changes*, 3.
[36] Scott, *Seeing Like a State*, 57-58. See also Jeanne Haffner, *The View From Above: The Science of Social Space* (Cambridge: MIT Press, 2013).

reshaping of the landscape as they did for the Seaway, but instead pointed towards a *discursive* reshaping of the Canadian envirotechnical imagination to attempt to make aviation in general, and air travel by TCA in particular, compatible with it.

The changing everyday experiences of "space" and "time," two hallmarks of technological modernity, are key to this compatibility. One model for examining this discourse is "time-space compression," where, according to historical geographer Barney Warf, "by accelerating the velocities of people, goods, and information, the world is made to feel smaller even as interactions are stretched over larger physical distances."[37] Coined by David Harvey in his late-1980s work on postmodernity, time-space compression is at once a part of the modern capitalistic experience, which connected time to labor and capital and space to new social organizations and markets, as well as the modern technological experience.[38] Time and space in and of themselves became increasingly moored to modern factors—street grids, railway schedules, mechanical clocks that signal the break between labor and leisure time, the daily printing and broadcasting of the news—but also increasingly *un*moored from everyday experiences as these time-and-space paradigms in and of themselves changed at a rapid pace. Space and time are each *produced* as modern political, economic, and technological phenomena "form a fixed frame within which the dynamics of a social process must unfold"; space and time are made, and then conquered by human artifice, and then made again.[39] As sociologist Manuel

[37] Barney Warf, *Time-Space Compression: Historical Geographies* (London: Routledge, 2008), 6. See also Stephen Kern, *The Culture of Time and Space 1880-1918* (Cambridge: Harvard University Press, 2003), especially 65-88.
[38] David Harvey, *The Condition of Postmodernity* (Oxford: Blackwell, 1989), 226-232.
[39] Harvey, *The Condition of Postmodernity*, 258.

Castells has famously claimed, "space does not reflect society, it expresses it."[40] This is obviously deeply connected to the communications networks developed through the nineteenth and early twentieth centuries—rail, telegraphy, telephone, digital networks, broadcasting, steamship, automobile, and eventually air travel—as well as the flows of information, goods, and people facilitated by those networks.

Writing in the 1980s, Harvey was particularly interested in the forms of time-space compression that had come to characterize his present. He referred to it as the "speed-up" of both communications technologies themselves and also of the economic cycles of industrial capitalism in which the turnovers of production and consumption increase in speed to the point that they become disorienting. Castells also points to end of the twentieth century as a turning point between "spaces of places" and "spaces of flows," in which an older spatial logic foregrounding localized social interaction is replaced by "simultaneous spatial dispersion and concentration via information technologies" across space.[41] I argue that commercial air travel is an early part of this "speed-up" or "space of flows" process because its compressive effects were both much more substantial and much more experientially transformative than other forms of transportation. That is, airplanes went faster, farther, and over more challenging territory than trains, steamships, or automobiles, gave passengers a democratized "God's-eye-view," and reshaped temporal patterns of labor and leisure in the form of the vacation. As I show in Chapter 4, for example, the language of the "speed-up" and subsequent monetization of labor and leisure affected how vacations to warm-weather destinations were imagined as both keeping in time

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[40] Manuel Castells, "Space of Flows, Space of Places: Materials for a Theory of Urbanism in the Information Age," in Stephen Graham, ed., *The Cybercities Reader* (London: Routledge, 2004), 83.
[41] Manuel Castells, *The Rise of the Network Society, Second Edition* (Oxford: Blackwell, 2010), 428.

with the ordered, Fordist system of mid-century labor and also existing outside of it. Furthermore, commercial airlines were an early version of this sort of transformation because their schedules, set destinations, and increased focus on *cities* as nodes in its network mimic the "space of flows," especially in the jet age. Although "the city" as a unit of analysis is not my focus here, it is worth noting that commercial air travel has been a player in Castells' "networked city" infrastructure. Even before the jet age, as I will show in Chapter 1, spaces between the origin and destination were homogenized and flattened to the point of disappearing entirely on route maps, reduced to a series of dots and lines.[42] In Canada especially, where "space" in the form of geographic size was an important aspect of national constructions of belonging, the homogenization of space and collapse of time by airplane represented a potential threat to earlier paradigms of nationhood developed in Canada's railway age.

Time, Space, and the Modern Canadian Envirotechnical Nation

"Space": Canadian Bigness

The new movements and flows of technological modernity and the associated homogenization of space pose "serious difficulties for the conception of place," Harvey has argued.[43] If "place" is a state of being-in, rather than moving-through, then the elasticity of time-space compression means that this state is not fixed, but can be made and re-made through the processes of modernity. James Vernon ties this plasticity of place to new forms of mobility in his work on modern Britain and argues that the challenges of governing the unprecedented movement of people, goods, and ideas across space disconnected daily life from the local,

[42] See, for example, Jenifer Van Vleck, *Empire of the Air: Aviation and the American Ascendancy* (Cambridge: Harvard University Press, 2013), 113-115.
[43] Harvey, *The Condition of Postmodernity*, 257.

creating what he calls a "society of strangers." This was not an easy process, he suggests, and it "generated a countermovement of attempts to reembed social, political, and economic relations in the local and personal."[44] Although Vernon is not particularly concerned with modernity and place as expressions of national identity, I am; Canada as a centralized nation has never existed outside of the compressive effects of modernity, so how do these modern concerns play out there? This section will explore how and why "Canadian bigness"—the aspects of geography associated with Canada's large size— has been so important for both actors and analysts interested in what makes Canada Canada.

Much like the United States, the acquisition of territory for empire (and later for country) has scaffolded how the nation has been imagined inside popular discourse. Even early settlers and explorers needed to adjust their senses of scale in terms of how big the American continent truly was, not to mention convincing their patrons back in Europe that the territory was as big as they made it out to be. Late-enlightenment-era gridding, mapping, and naming—propelled in what would eventually become Canada by the Hudson's Bay Company—revealed to settlers both the barriers and opportunities of such a massive space. The scientific measurement of the territory was accompanied by an insistence that these far-flung corners of the land, in which few European settlers lived, needed to be legislatively connected to (relatively) densely-populated British North America. The latter two-thirds of the nineteenth century saw the consolidation of the four provinces of British North America into Canada, the addition of three more provinces in the East and West, the resolution of the southern border with the United States, and the purchase and acquisition of almost 10 million square kilometers of land from the Hudson's Bay Company

[44] James Vernon, *Distant Strangers: How Britain Became Modern* (Berkeley: University of California Press, 2014), 14.

and Great Britain.[45] The size of the nation has also had an effect on how the country has historically been studied, such as the interrelated Staples and Laurentian theses of Canadian history. Harold Innis and Donald Creighton, writing in the 1930s, each suggested that the movement of natural resources across large spaces was key to Canadian economic development; Innis famously argued that the energy of early Canada was channeled directly and indirectly into the extraction, transportation, and production of raw materials, while Creighton saw the St. Lawrence River as a geographic axis for political and commercial development.[46] Both of these theses have been challenged and even displaced in the twenty-first century as environmental historians have questioned the characterization of staples and complicated the value of the St. Lawrence river to Canadian-ness.[47] However, the foundational idea that the land itself has made Canada and Canadians special remains in cultural discourse.[48] In one of his "pride-builder" broadcasts in the late 1940s, Fisher connected breadth of territory with magnanimity of spirit, characterizing Canada as a "harmless giant," performing well on the "test of bigness" set out by its founders.[49] The experience of Canadian bigness was imagined as an overwhelming sublime, since Canada, even in the nineteenth century, was unfathomably big. Popular turn-of-the-

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[45] For Canadian expansionism, see Doug Owram, *Promise of Eden: The Canadian Expansionist Movement and the Idea of the West, 1856-1900* (Toronto: University of Toronto Press, 1992) and Ted Binnema, *Enlightened Zeal: The Hudson's Bay Company and Scientific Networks, 1670-1870* (Toronto: University of Toronto Press, 2014), especially 199-237.
[46] Harold Innis, *The Fur Trade in Canada* (New Haven: Yale University Press, 1930); Donald Creighton, *The Commercial Empire of the St. Lawrence, 1760-1850* (Toronto: Ryerson Press, 1937).
[47] On the Laurentian thesis, see Macfarlane, *Negotiating a River*, especially 13-15. On "staples" see Eric W. Sager, "Wind Power: Sails, Mills, Pumps, and Turbines" in *Powering Up Canada: A History of Power, Fuel, and Energy from 1600*, ed. R. W. Sandwell (Montreal and Kingston: McGill-Queen's University Press, 2016), 162-185.
[48] See, for example, Ryan Edwardson, *Canuck Rock: A History of Canadian Popular Music* (Toronto: University of Toronto Press, 2009).
[49] John Fisher, *John Fisher Reports* (Hamilton: Niagara Editorial Bureau, 1949), 3-5.

millennium parody band the *Arrogant Worms* put this sentiment succinctly in their song "Canada's Really Big": "it isn't what you do with it/it's the size that counts." Through this sort of geographic rhetoric, Canada is kept "imaginatively empty," implying that Canada only exists "by virtue of taking up space."[50] It is the space itself that supports Canadian-ness.

"Canada is best known for being big," historian Alan MacEachern has recently written, but despite the fact that Canada's size has been "a constant theme, if not an outright fixation, of Canadian scholarship and thought," there has yet to be a definitive study of Canadian size in history.[51] That is, we know what Canada's size means to us, but have yet to critically engage with what it *has meant* to us, why "bigness" became so relevant in the first place, and what effects it has had on historical, cultural, and even techno-scientific trajectories. Communications and cultural theorist Northrop Frye suggested in the 1970s, for example, that the Canadian cultural imagination is framed by a "garrison mentality," which emerged as a result of "being separated from one another and from...American and British cultural sources" while also being "confronted with a huge, unthinking, menacing, and formidable physical setting."[52] In her contemporary analysis of themes in Canadian literature, Margaret Atwood called it "Survival": an "almost intolerable anxiety" about physically existing at the margins of a threatening physical environment. This also refers to intangible obstacles to what Atwood calls "spiritual survival," for which the environment provides a useful literary metaphor.[53] However, these postmodern

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[50] James F. Cosgrave and Patricia Cormack, *Desiring Canada: CBC Contests, Hockey Violence, and Other Stately Pleasures* (Toronto: University of Toronto Press, 2013), 54.
[51] Alan MacEachern, "A Little Essay on Big: Towards a History of Canada's Size," *Rachel Carson Center Perspectives* 4 (2011): 6–7.
[52] Northrop Frye, *The Bush Garden: Essays on the Canadian Imagination* (Toronto: House of Anansi, 1971), 225.
[53] Margaret Atwood, *Survival: A Thematic Guide to Canadian Literature* (Toronto: House of Anansi, 2012), 27-28.

discussions of Canadian bigness are not grounded in the physical realities of living in place, nor do they point to the connections between dominion over territory and settler colonialism.

Although it is not the purpose of this project to engage in any significant way with First Nations land use or settler colonial territorial expansion, this vision of Canadian bigness "that identifies Canada's vast spaces as alien while simultaneously assigning them to [settlers] is profoundly colonial."[54] The awareness and relevance of Canada's scale is a product of settler-colonialism in and of itself, as state legibility by techno-science required a resonant transcontinental vision of nation. Furthermore, using outward-focused markers of "wilderness" as a way to engage with Canadian size, as commentators such as Frye and Atwood did, allows Canada to be defined by "where we are" without actually existing in that space. In this work, I will answer, at least to a limited extent, MacEachern's call for historical interpretations of Canadian bigness by including Canada's size as part of the modern Canadian envirotechnical nation. By focusing on specific iterations of Canadian bigness—those necessary to prop up the acceptance and use of state-supported techno-scientific infrastructure—I will show that it shaped modern Canadian constructions of what it meant to belong to the land, how that belonging changed when the land was experienced through time-space compression, and how it was stretched thin by increasingly easy departures from a place that seemed to only get smaller.

"Time": Canadian Climates

Like the Canadian culture of "bigness," the aspects of Canadian national identity connected to the nation's allegedly harsh winters are rooted in the politics, culture, and natural history of Victorian settler society, especially the neo-Hippocratic sciences linking airs, waters,

[54] MacEachern, "A Little Essay on Big," 8.

places, and peoples. Largely associated with eighteenth century French thinkers such as Montesquieu and Buffon, environmental or climatic determinism became a convenient method by which imperial administrators justified their influence over colonial holdings. Most environmental determinists focused on how warm climates affected human temperament and government, as this was most useful to European imperial territories in Africa, Asia, and South America. The alleged weaknesses of those living in extreme heat both encouraged imperialists to take what they saw as natural control over the tropics and also underscored anxieties over European colonial settlement.[55] These questions about race, climate, environment, and empire informed government, resource management, and scientific communities such as the emerging field of tropical medicine as settlers and colonial administrators wondered what would happen to *their* bodies as they spent time in tropical environments that appeared to deteriorate their inhabitants.[56]

Settlers in more northerly holdings such as Canada and the United States engaged with a different sort of climate rhetoric. Although early modern settlers wondered why their children born in America did not have dark skin like the indigenous inhabitants, climate discourse in the northern parts of the Americas eventually coalesced largely around European *control* over their

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[55] David Livingstone calls this "moral climatology." David Livingstone, "Race, space and moral climatology: Notes toward a Genealogy," *Journal of Historical Geography* 28:2 (2002): 159-180 and "The Moral Discourse of Climate: Historical Considerations on Race, Place, and Virtue," *Journal of Historical Geography* 17:4 (1991): 413-434. See also Eric Jennings, *Curing the Colonizers: Hydrotherapy, Climatology, and French Colonial Spas* (Durham: Duke University Press, 2006); Pascal Grosse, "Turning Native? Anthropology, German Colonialism, and the Paradoxes of the 'Acclimatization Question,' 1885-1914" in *Worldly Provincialism: German Anthropology in the Age of Empire*, H. Glen Penny and Matti Bunzl, eds (Ann Arbor: University of Michigan Press, 2003), 179-197.

[56] Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600–1860* (Cambridge: Cambridge UP, 1995); James Duncan, *In the Shadows of the Tropics: Climate, Race and Biopower in Nineteenth-Century Ceylon* (Aldershot: Ashgate, 2007).

environments and how those environments could have an impact on governmental and social structures.[57] In the United States, environmental determinists believed that eighteenth century agrarianism was modifying the climate for the better, while natural historians used discoveries such as mammoth fossils to refute theories of deterioration.[58] In Canada, climate discourse became a part of burgeoning ideas of nation and identity. Nowhere is this more apparent than in the rhetoric of the Canada First Party, most active around Confederation (1867). Their widely circulated addresses and pamphlets concerning what Canada's northerness meant for Canadians as a "race" and as the next generation of imperialists captured the fledgling national imagination. Linking settlers to the great northern races of history, especially the Normans, was a common strategy that gave both English and French Canadians a special claim to their wintry land. Bolstered by the rhetoric of environmental determinism, Canada First member and historian Robert Grant Haliburton used his most famous address, "The Men of the North and Their Place in History," to claim that Canadian weather conditions awakened a deep historical ancestry:

> "[T]he cold north wind that rocked the cradle of our race, still blows through our forests, and breathes the spirit of liberty into our hearts...[W]e must be a hardy, a healthy, a virtuous, a daring, and if we are worthy of our ancestors, a dominant race."[59]

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[57] Joyce Chaplin, "Natural Philosophy and an Early Racial Idiom in North America: Comparing English and Indian Bodies," *The William and Mary Quarterly* 54:1 (1997): 229-252

[58] Anya Zilberstein, *A Temperate Empire: Making Climate Change in Early America* (Oxford: Oxford University Press, 2016); Lee Alan Dugatkin, *Mr. Jefferson and the Giant Moose: Natural History in Early America* (Chicago: University of Chicago Press, 2009).

[59] R. G. Haliburton, "The Men of the North and Their Place in History," *The Ottawa Journal*, March 20, 1869.

Party leader William Alexander Foster expanded on Haliburton's metaphor, claiming that Canadians were responsive to "the old Norse mythology, with its Thor hammers and Thor hammerings...for we are a Northern people…more manly, more real, than the weak...effeminate" United States.[60] This created a sense of what anthropologist Eva Mackey calls "icy white nationalism"; the United States was not an Anglo-Saxon country by Canada First standards because the southern climate would cause Euro-American degeneration and also would only attract weaker settlers unable to survive in the north.[61] Carl Berger's 1966 essay on Canada's identity as the true north, strong and free is a hallmark in this field, and he argues that boosters used Canadian winters to promote national unity, racial purity, personal and state liberty, and anti-American sentiment.[62] Confederation-era Canadians seemed to be subtly aware that they were creating, or at least curating, a climatic identity from this ad-hoc assemblage of nineteenth century artistic, scientific, cultural, and political approaches to environment and nation.

This awareness emerges most often in balancing Canadian settler identity with British tourism and immigration. The British press was often accused of exaggerating Canadian winter hazards, which made Canada seem less inviting. Newspapers and pamphlets measured temperatures, snowfalls, and agricultural and industrial outputs to show that Canadian winters were milder than they seemed. An 1885 front-page editorial in the *Prince Albert Times* refuted the *London Standard*'s claim that "the thermometer has registered 50 below zero at Winnipeg

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[60] William Alexander Foster, *Canada First or Our New Nationality* (Toronto: 1888).
[61] These "settlers" very explicitly include those of African and Afro-Caribbean descent. Eva Mackey, *The House of Difference: Cultural Politics and National Identity in Canada* (London: Routledge, 1999), 31.
[62] Carl Berger, "The True North Strong and Free," in *Canadian Culture: An Introductory Reader*, Elspeth Cameron, ed (Toronto: Canadian Scholars' Press, 1997), 83-102. See also Berger, *The Sense of Power: Studies in the Ideas of Canadian Imperialism, second edition* (Toronto: University of Toronto Press, 2013), especially 128-152.

and...that life is not safe during periods of such extreme cold," by arguing that the Winnipeg observatory had never measured temperatures colder than -46°.[63] Another strategy was to argue that to know Canadian winters was to love Canadian winters. If only British newspapermen might "spend one twelvemonths in our midst," or have "the courage to encounter...[Canada's] world-renowned snows," then they might understand the invigorating nature of the Canadian climate.[64] However, British press accounts weren't the only culprits, as one *Globe* editorial cautioned, "for our own press is continually doing the same thing."[65] Canadian literary and artistic self-representations were also guilty of portraying "winter scenes and no others," according to the *Calgary Weekly Herald*, since "if we wish our portrait taken...we don all the furs we own, and arrange for a background of winter, and possibly a fall of snow."[66] Winter sports such as sledding, skating, and hockey were championed by Canadian boosters, and a culture of winter carnivals—some of which are still in operation—emerged in Canadian cities as a sort of conspicuous winter performance. Even attempts to refute potential one-dimensional portrayals of Canadians as cold-weather people seemed to increase climate-related discourse and reinforce Canadian winter symbols.

By the early twentieth century, Canadian latitudes, climates, and winter pastimes were often treated as a single unit of discussion, an early example of the substitution of space and place with time that I discuss in Chapter 1. That is, "Canadian climate" stories became "winter" stories, tying the daily experiences of living in Canadian climates to *time* in the form of seasons. This was not an exclusively Canadian change; Megan Prins has recently suggested that through

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[63] "Our Climate," *Prince Albert Times*, February 13, 1885.
[64] "The Times and the Canadian Climate," *The Globe*, October 10, 1874; William Hutton, *Emigration to Canada* (Québec: J. Lovell, 1860), 24.
[65] "Notes and Comments," *The Globe*, June 16, 1883.
[66] "Our Climate," *Calgary Weekly Herald*, March 15, 1900.

this period, "winter" in North America became an increasingly urban analytic category, defined through consumption, infrastructure, leisure, and labor.[67] In Canada especially, the experience of urban winters and the associated symbols such as toboggans and toques became a part of Gilded Age self-fashioning very much separate from the discourse applied to Canada's Arctic regions. Arctic sciences and industries, which often focused on resource extraction, established Canada's northern regions as very different but also connected to Canada's south. However, as Northern Studies scholars Renée Hulan and Sherrill Grace have argued, there are "a wide range of fascinating, contradictory associations" between Northern Canada and Canada-as-North, implying a divide between "north" as a place and "winter/cold" as times.[68] The North, as an analytic *and* as a region, has been used as a multi-faceted proxy for the entire country.[69] The turn-of-the-century version of Canada-as-North might perhaps more accurately be called Canada-as-winter, or at least Canada-as-cold, suggesting a climatic/seasonal identity tied to everyday experience and material culture.

The tropes that Canadians were uniquely suited to cold temperatures, that Canadian winters were somehow special, and, somewhat paradoxically, that Canadian technologies especially could transcend climatic barriers to mobility, were embedded in settler culture by the time TCA began flying, and they were being framed by new modern redefinitions of "time." In

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[67] Megan Prins, "Winters in America: Cities and Environment, 1870-1930" (PhD diss., University of Arizona, 2015): 17-18.
[68] Sherrill E. Grace, "Canada and Its Images of North," in *Images of the North: Histories, Identities, Ideas*, ed. Sverrir Jakobsson (Amsterdam: Rodopi, 2009), 64. See also Rob Shields, *Places on the Margin: Alternative Geographies of Modernity* (London: Routledge, 1991), 162-206 for how "North" has been used as a sort of hegemonic national discourse, smoothing over other regional (and gendered, and racialized, and indigenous) identities.
[69] See, for instance, Sherrill Grace, *Canada and the Idea of North* (Montreal and Kingston: McGill-Queen's University Press, 2007) and Renée Hulan, *Northern Experience and the Myths of Canadian Culture* (Montreal and Kingston: McGill-Queen's University Press, 2002).

Chapter 2, for example, I examine how Canada's allegedly harsh winters made passengers wary of flying in wintertime and how TCA advertised particular technological systems on its aircraft as season-removers. I also show how critics imagined that airliners were part of a cadre of technologies responsible for eroding Canadian winter identity by making the lived experience of winter optional, or at least less difficult. Indoor heating, covered garages, and municipal snow-removal services all threatened the allegedly character-building experiences of winter through the twentieth century, but because of its ability to transport Canadians to other climates entirely, air travel was especially culpable. Chapter 4 is devoted to the roots of the popular "snowbird" tradition, in which Canadians (and those from the Northeast USA) flock in massive numbers to warm-weather destinations such as Florida and the Caribbean in the winter. TCA's earliest public depictions of flying south for the winter point to emerging tensions between time and the modern experience by framing what they sold to the Canadian public as *time travel*; Canadian winters remained discursively intact even if no one was there to experience them. These tensions show up again in Chapter 5, in which the increased speed and power and decreased cost of jet travel made these climatic escapes even more popular with vacationers and even less popular with critics who questioned what was left of Canadian national identity by the final third of the twentieth century.

Time-Space Compression: Technologies and Nationalisms

Of course, these environmental nationalisms could not be culturally resonant, let alone manageable by a centralized state, without a corresponding set of Canadian national myths about communications technologies. Instead of abstract, sublime "bigness," Canadian space needed to be measurable, or at least concretely grounded in place, in order to be what Scott would consider

"legible" to the state. This is what Maurice Charland has called "technological nationalism," relatively unique to English Canada, "which ascribes to technology the capacity to create a nation by enhancing communication."[70] Victorian techno-scientific practices in pre-Confederation Canada were vital to these constructions of Canada as a sea-to-sea nation. As Suzanne Zeller has argued, "inventory sciences," most obviously the Canadian Geological Survey in the 1840s, helped Canadians imagine that a single centralized nation could be possible in Canada despite the unimaginably large territory. British North Americans living in Canada were assigned the same characteristics as the land itself—"extension, construction, permanence, grandeur...opening up long, gleaming perspectives into both time and space," as Thomas D'Arcy McGee famously claimed in the 1860s—bolstered by scientific endeavours that connected geologic time to the settler geographic imaginary.[71] Euro-Canadians therefore self-fashioned as being unique products of the land, but in order to build a singular identity they needed to communicate with, access, and govern each other across the vast expanse of that land.

Because of this, rail was absolutely vital to this construction. The Canadian Pacific Railway, part of Canada's first Prime Minister John A. MacDonald's "national dream" of a united Canada, began simultaneous construction west from Ontario and east from British Columbia in the early 1880s. The "last spike" connecting the Canadian Pacific network in the western provinces was hammered in Craigellachie, British Columbia, on November 7, 1885, a

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[70] Maurice Charland, "Technological Nationalism," *Canadian Journal of Political and Social Theory* 10:1 (1986): 197. See also Marco Adria, *Technology and Nationalism* (Montreal and Kingston: McGill-Queen's University Press, 2009), 33–71 and Mary Vipond, *The Mass Media in Canada* (Toronto: Lorimer and Company, 2000), 25-43.

[71] Thomas D'Arcy McGee, "A Further Plea for British American Nationality," *The British American Magazine* 1 (1863): 563. Suzanne Zeller, *Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation* (Montreal and Kingston: McGill-Queen's University Press, 2009), especially 110-111 and 3-10.

date that is occasionally considered a more appropriate choice for Canada Day, which celebrates the British North America Act of July 1 1867. Because the evocative discourse of rail resonated through the entire twentieth century, I will spend a moment here exploring both the history and historiography of rail in Canada, especially as it connects to technological nationalism and the rhetoric of transcontinentality. The railway is the most conspicuous manifestation of technological nationalism and is Charland's main concern in his work on the subject, although recent works by Robert MacDougall, Liza Piper, and Caroline Desbiens show how other systems such as telephony, freighting, and power generation not only allowed literal access to distant regions, but also helped develop an imagined trans-national connectedness.[72] However, scholars have also situated the codification and most explicit expressions of railway nationalism squarely inside late modernity; cultural historian Daniel Francis and communications scholar Robert Babe each point to Pierre Berton's celebrated early-1970s books *The Last Spike*, *The Impossible Railway*, and *The National Dream* as some of the most concrete expressions of the phenomenon.[73] Even Gordon Lightfoot's "Canadian Railroad Trilogy," probably the most famous musical expression of technological nationalism, was commissioned by the CBC for Canada's 1967 centennial celebrations.[74]

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[72] Robert MacDougall, "The All-Red Dream: Technological Nationalism and the Trans-Canada Telephone System," in *Canadas of the Mind: The Making and Unmaking of Canadian Nationalisms in the Twentieth Century* ed. Norman Hillmer and Adam Chapnick (Montreal and Kingston: McGill-Queen's University Press, 2007), 46-62; Liza Piper, *The Industrial Transformation of Subarctic Canada* (Vancouver, UBC Press, 2010); Desbiens, *Power From the North*.

[73] See also E. J. Pratt's narrative poem "Towards the Last Spike," published in 1952, which connects the railway to splitting the atom and the theory of relativity and, according to literary scholar William New, "appealed because it brought together the whole set of conventions that underlay the nationalism of the time." W. H. New, *A History of Canadian Literature: Second Edition* (Montreal and Kingston: McGill-Queen's University Press, 2003), 191.

[74] The song, which every settler Canadian knows, was a stylistic and thematic departure for Lightfoot; music historian Ryan Edwardson is quick to remind us that it was "not an act of

In a recent essay, business scholar Melissa Aronczyk actually divides Canadian rail nationalism into two stages; the development of the myth in nineteenth century material and the "'rebirth' and popularization in the late 1960s."[75] "The myth of the CPR was in the air long before Berton," Daniel Francis also argues, and "is, in fact, as old as the railway itself."[76] Just as Zeller suggests that there was no such thing as a settler Canadian nation outside the Darwinist ideas of evolution, there too was no such thing as an imagined settler Canadian nation in a world without railways.[77] Communications technologies were an undergirding for Confederation thought and philosophy; the ingenuity of settlers was what allowed for dominion over such a challenging territory.[78] There was, historian A. A. den Otter suggests, "a political understanding that dominated mid-nineteenth-century Canada...a general faith in railway technology as the panacea for Canada's economic and social ills [that] epitomized a remarkable agreement on the liberal principle of economic progress achieved through technological advancement."[79] Rail access was wielded like a weapon to keep regional interests in line, supported the development of other communications infrastructure such as the Post Office and telegraphy, and was imagined in nationalist discourse as the primary driver for national development.[80] Intellectual historian R.

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nationalistic prerogative but a made-to-order song about the railway," noting that Lightfoot didn't even bother to use the more Canadian term "Railway" in favor of the American "Railroad." Edwardson, *Canuck Rock*, 93.

[75] Melissa Aronczyk, "Raw Materials: Natural Resources, Technological Discourse, and the Making of Canadian Nationalism," in Geneviève Zubrzycki, ed., *National Matters: Materiality, Culture, and Nationalism* (Stanford: Stanford University Press, 2017), 59.

[76] Daniel Francis, *National Dreams: Myth, Memory, and Canadian History* (Vancouver: Arsenal, 1997), 16-17.

[77] Suzanne Zeller, *Inventing Canada*, 244.

[78] A. A. den Otter, *The Philosophy of Railways: The Transcontinental Railway Idea in British North America* (Toronto: University of Toronto Press, 1997); R. Douglas Francis, *The Technological Imperative in Canada: An Intellectual History* (Vancouver: UBC Press, 2010).

[79] Den Otter, *The Philosophy of Railways*, 33.

[80] For example, Gustavo Velasco has recently used historical GIS techniques to map rail and postal development in western Canada in the second half of the nineteenth century. Gus Velasco,

Douglas Francis refers to this as the "technological imperative" and suggests that railways were the first technological system in Canada to inspire "sustained reflections on its significance"; thinkers imagined that "railways were inaugurating a new world in which technology would be the dominant force, an imperative."[81] In the context of this project, not only did the railway do the rather practical job of connecting Canadians across distances, but it also was a widely recognizable symbol of industry, progress, and modernity. "It embodied the age," den Otter argues, "for here was an instrument of power and speed, noise and fire, iron and smoke, confined to a pre-determined path."[82] That is, rail was not only the technological support for the Canadian settler nation, but it was the technological support for the *modern* Canadian settler nation, opening a new world in which the technological collapse of space and time could support and maintain nationhood.

This is why railway nationalism was such a potent metaphor during its late-modern "revival" by Berton, Lightfoot, and various state agents—the "Confederation Train" traveling exhibit made for the Canadian centennial in 1967 appears briefly in my conclusion, for example. It suggested that because Canada had always had transcontinental rail infrastructure, Canada had always been a "modern" nation while at the same time making "communication" a vital, almost ahistorical, aspect of being Canadian. "So ingrained in the Canadian imagination has been this purported link between Canadian nationhood on the one hand and media of communication on the other," Robert Babe writes, that it has had "important policy repercussions" well into the late

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"The Post, the Railroad, and the State: An HGIS Approach to Study Western Canada Settlement, 1850-1900," in Ian Gregory et. al., eds. *The Routledge Companion to Spatial History* (London: Routledge, 2018), 375-393.

[81] Francis, *The Technological Imperative in Canada*, 6.

[82] Den Otter, *The Philosophy of Railways*, 23.

twentieth century.[83] This in turn points to the return, so to speak, to the myth of transcontinental rail as foundational to Canadian-ness as a response to the same concerns I address in this dissertation, a desperate reach towards narratives of special settlers and their special geography that hit its apex just as the timeframe for my project ends.

"Technological nationalism" and the nationalisms embedded in Canadian geographies and climates are compatible. As Edward Jones-Imhotep has recently argued, they can even be essential to each other as the state used large techno-scientific communications projects to "document and transform" both its physical territory and its visions of geography, sovereignty, and nationhood.[84] The value of "communication" as both a concept and a physical infrastructure to Canadian self-fashioning is especially evident in Harold Innis' inclusion of natural and human-made transportations as "communications" technologies. As Babe has shown, "even the production or extraction of natural resources (or 'staples') constituted 'communication' for Innis. The extraction or production of staples creates environments, or ecosystems, that *mediate* human relations and otherwise affect a people's thoughts and actions."[85] By this token, human interactions with communications technologies and the distances they seek to transcend give those distances meaning. As perhaps Canada's greatest railway storyteller, Gordon Lightfoot, sings, "the green dark forest was *too silent to be real*" before settlers arrived with their wheels and railways.[86]

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[83] Robert Babe, *Telecommunications in Canada: Technology, Industry, and Government* (Toronto: University of Toronto Press, 1990), 5-6. See also Francis, *National Dreams*, 15-28.
[84] It's sort of like quantum geography; measuring it changes the outcome. Edward Jones-Imhotep, *The Unreliable Nation: Hostile Nature and Technological Failure in the Cold War* (Cambridge: MIT Press, 2017), 194. See 189-214 for his study of broadcasting in the North.
[85] Emphasis added. Robert Babe, *Canadian Communication Thought: Ten Foundational Writers* (Toronto: University of Toronto Press, 2000), 59.
[86] This, of course, ignores millennia of indigenous occupation and their very "real" envirotechnical ways of knowing.

However, in making the spatial regimes of a transcontinental Canada "real," modern communications technologies threatened Canada's identity as a nation existing just at the edge of geographic possibility. Northrop Frye argued, for example, that Canada was especially prone to the "obliterated environment," as "jet planes, international hotels, and disappearing landmarks" exposed the incommensurability between unity on a national scale and more intimate place-based belonging; Canada's vulnerabilities lay in its "empty spaces, its largely unknown lakes and rivers and islands...[and] its dependence on immense railways to hold it physically together."[87] The threat of the "obliterated environment" took two related forms in high-modern Canada. First, unlike rail, air travel and other high-modern communications infrastructures did not "hold" the territory together because they were not intimately tied to the land, as I will discuss below. Airways did not traverse Canada's vastness in the same way that railroad tracks did, soaring above points on a map rather than brutally barreling between them. Second, as Edward Jones-Imhotep has recently argued, the realities of the early Cold War and hostile Canadian environments made certain components of technological orders appear unreliable. Rather than producing a distinctive Canadian envirotechnical experience, these components highlighted instead the limits of geography as a marker of national ability and subsequently allowed instability and unreliability to become part of high-modern "technological nationalism."[88] Emerging techno-scientific challenges, especially those in "new" environments such as the Arctic and upper atmosphere, made Canadian distances and Canadian communications more

[87] Northrop Frye, "Preface to *The Bush Garden*," in *Northrop Frye on Canada Volume 12*, eds. Jean O'Grady and David Staines (Toronto: University of Toronto Press, 2003), 414. See also Jones-Imhotep, *The Unreliable Nation*, 4.
[88] Jones-Imhotep, *The Unreliable Nation*, 6-10.

difficult to reconcile inside high-modern nationalist discourse and had to be therefore united by the rhetoric of technological failure.

Rail was able to escape the most obvious aspects of these challenges because of its prominence before high modernity, but also because of the discursive focus on the intimate technological body-work of constructing the railway and the lived experience of traversing the nation. The act of boring paths through mountains and laying rails across the entirety of the Canadian nation had and has more cultural currency than actually travelling on the train. The technology itself, the landscapes onto which it was imposed, and the processes of building it therefore become wrapped up in what David Nye might call a "technological creation story," where the land appeared to be specially laid out for settlers to apply their technology and industry.[89] Canada-as-nation could only exist through the labor and power required to construct the railways, which in turn could only exist because of the specificities of Canadian geography. Air travel, on the other hand, did even more time-space compression than rail and was also missing the intimacy that made rail special in Canada, a double-blow to envirotechnical constructions of the modern Canadian nation. Certainly, airports have affected how cities grow, and the development patterns of Canada's northern regions were partially dictated by air routes, but this is *nothing* compared to traversing the nation rail-spike by rail-spike.[90] The rhetoric of struggle to overcome distance by industry and ingenuity that prevailed in railway boosterism was much harder to attach to air travel; compared to tunneling through the Rocky Mountains, the establishment of sea-to-sea radio communication necessary for transcontinental air travel seemed

[89] For a list of features necessary for a "technological creation story," see David Nye, *America as Second Creation: Technology and New Beginnings* (Cambridge: MIT Press, 2004), 12-15
[90] Christopher Schaberg, *The Textual Life of Airports: Reading the Culture of Flight* (New York: Continuum, 2012); Drew Whitelegg, "Keeping their eyes on the skies: Jet aviation, Delta Air Lines and the growth of Atlanta," *Journal of Transportation History* 21 (March 2000): 73–91.

easy. Regular airline travel also threatened to stretch geographic reach *too far*, making Canada's special distances irrelevant, or at least mundane. Rapidly expanding air-travel infrastructure through the immediate postwar years called for new Canadian envirotechnical paradigms that built on older narratives of "technological nationalism" but renegotiated them inside modern Canadian contexts. Canada had to be re-imagined as an "aviation nation" that made the virtual elimination of Canada's mythical distances by high-modern systems as vital to national self-fashioning as the distances themselves.

What Is Envirotech?

Air travel's influence on modern Canadian self-fashioning therefore suggests that it can, and should, be examined as an envirotechnical system. Scholars have long associated technology with the human need to "modify, subdue, and control" their surroundings, but only relatively recently have environmental historians and historians of technology actively sought to open the black boxes of one field with the crowbars provided by the other.[91] "Envirotech" makes use of the constructivist and materialist tendencies of environmental history and the history of technology in order to examine "nature, technology, and their relationship *within* and *as* history," as Sara Pritchard has argued in her 2011 book about the Rhône river.[92] Nature and technology might both be cultural constructions, as William Cronon has famously claimed about the former, but the physical limits nature places on historical and technological change remind us of their

[91] Jeffrey Stine and Joel Tarr, "Technology and the Environment: The Historians' Challenge," *Environmental History Review* 18:1 (Spring 1994): 1. For more recent historiographic analysis of the technology-environment nexus, see Hugh Gorman and Betsey Mendelsohn, "Where does Nature End and Culture Begin?" in *The Illusory Boundary: Environment and Technology in History,* edited by Martin Reuss and Stephen H. Cutcliffe (Charlottesville: University of Virginia Press, 2010), 265-290.
[92] Pritchard, *Confluence*, 2-3.

tangible effects.[93] In so doing, Pritchard identifies a quadripartite set of concerns for envirotech scholars—nature, culture, technology, and politics—and suggests that envirotech must engage with all four without placing them in opposition or resorting to determinism.[94]

Given these concerns, the majority of envirotech study in its first twenty years or so has been devoted to large technological projects such as dams, nuclear power plants, and highways, which by their size require centralized state investment and control and have large-scale visible, measurable environmental impacts.[95] Water management in particular has been a popular way to observe and analyze the nature-culture-technology-power nexus for the first generation, so to speak, of explicitly envirotechnical scholars. Sara Pritchard, Daniel Macfarlane, Chandra Mukerji and David Biggs have used "wild" waters as a way to unlock envirotechnical frameworks.[96] In these studies, the environment in question is given its own form of agency: dams flood, runoff appears in unwanted places, and sandbars block the passage of ships. Built technologies do not always "triumph" over the natural world, and envirotech gives both nature's and technology's victories analytic value. Nature, in short, can fight back when treated as an

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[93] William Cronon, *Uncommon Ground: Rethinking the Human Place in Nature* (New York: W. W. Norton, 1996), 52. For earlier thinking on constructed environments that informed Cronon, see Raymond Williams, "Ideas of Nature," in *Problems in Materialism and Culture* (London: Verso, 1980), 67-85.

[94] Pritchard, *Confluence*, 17. See also Pritchard, "Joining Environmental History with Science and Technology Studies," in *New Natures: Joining Environmental History with Science and Technology Studies*, edited by Dolly Jørgensen, Finn Arne Jørgenson, and Sara Pritchard (Pittsburgh: University of Pittsburgh Press, 2013), 1-17.

[95] For example, David Biggs, *Quagmire: Nation-Building and Nature in the Mekong Delta* (Seattle: University of Washington Press, 2012); Christopher Jones, *Routes of Power: Energy and Modern America* (Cambridge: Harvard University Press, 2014); Mukerji, *Impossible Engineering*; Thomas Zeller, *Driving Germany: The Landscape of the German Autobahn, 1930 1970* (New York: Berghahn, 2007).

[96] For more on how studying water can be useful see Peter Soppelsa, "Water and Power in Modern France," *French Politics, Culture & Society* 31:2 (Summer 2013): 117-132.

agent in studies of technology and the environment, and water, given its universal properties and frequent historical anthropomorphization, has acted as a gateway "nature" for this treatment.

The focus on large-scale centralized state projects in this first generation of envirotech also means that "the nation" is often an analytic inside these envirotechnical stories. One such example is Chandra Mukerji's *Impossible Engineering*, which tells the story of the 17th century construction of the Canal du Midi in southern France. She suggests that this was a historical moment when the land itself was imbued with new symbolism, and the Canal du Midi, therefore, becomes both a vehicle for and a result of changes in politics, culture, and approaches to engineering and the natural world. Thomas Zeller's work on the Autobahn under two separate regimes—the Nazis and the Federal Republic—further shows the interpretive flexibility of the same system under different national self-constructions, especially in terms of "the relationship of the autobahnen to the landscape surrounding them and shaped by them."[97] The landscape as seen from the highways, he argues, was a contested site of political and social meaning, shaped by the ruling party's vision of nature, technology and nation, but also experienced by individuals driving their own cars along the route.

Studying such overwhelmingly large megaprojects almost requires analysis of these intimate interactions with it to balance the narrative and give it a "human" dimension. A number of envirotechnical scholars have therefore begun to examine how everyday life in built and natural environments changes when large-scale technological systems enter. Canadian geographer Joy Parr reflects on many of these themes, such as government projects and direct technological modification of the natural world, in her pathbreaking book *Sensing Changes*, but instead focuses on what she calls "embodiment history": "how bodies learn and reason about

[97] Zeller, *Driving Germany*, 2.

their habitats and tools."[98] She argues that people who lived and worked in and around military bases, nuclear plants, and hydroelectric dams needed to re-organize their senses of place, space, and self. By examining how "ordinary" Canadians embodied the changes to their technologically-modified environments, she shows how places provide an intangible sense of identity and community as they are experienced through technologies.

As Mukerji, Parr, and Pritchard all argue, "place matters in technological innovation," and it is from here that the envirotechnical aspects of my own work arise.[99] In this dissertation, I push the boundaries of envirotech by focusing on air travel's impact on the *imagined* environment. Air travel might not have the same sort of footprint that popular envirotechnical subjects such as dams might, but it alters perceptions of geography and nationhood. Canada *looks* different from above and *feels* different when travelling at five-miles-a-minute, and airliners are the mediators for these perceptions. Canadian landscapes may have been minimally altered by commercial air travel, but mid-century "imagined" Canada owes a great deal to traveling across and viewing the nation from above. Zeller's "axiomatic statement" that "transportation and landscape shape each other" is especially valuable here, as I argue that this shaping is both physical *and* discursive.[100] Here, Jasanoff and Kim's "sociotechnical imaginaries" meet envirotechnical impacts; state infrastructure projects are developed inside a set of socio-cultural concerns and the particularities of the environment change how the projects

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[98] Joy Parr, *Sensing Changes*, 13.
[99] See, for instance, Mukerji *Impossible Engineering*, 13.
[100] Zeller, *Driving Germany*, 5. For an excellent study of this sort of thing in the Canadian context, see Ben Bradley, *British Columbia By the Road: Car Culture and the Making of a Modern Landscape* (Vancouver: UBC Press, 2016), in which he argues that drivers in the British Columbia interior all experienced more-or-less the same landscapes (because of limited road systems) and those landscapes were therefore rife for manipulation by the state.

are implemented, but, most importantly for this dissertation, those socio-cultural concerns shape what the technological system is imagined to *do* to those environments.

Why Advertising? Why TCA?

As a way of bridging the top-down state megaproject and the everyday envirotechnical experience, I have chosen to engage with the public-facing discourse developed by Trans-Canada Airlines. Publicity material created by the state is obviously a way in which we can see what might be called "official" narratives of nature, technology, and nation, but it can also tell us about the intangible ways in which technology disrupts or threatens older paradigms. For example, I show in Chapter 4 that anxieties about the "speed-up" in labor and leisure, the commodification of vacations, and the modern distancing of Canadians from their winters via technologies were coded inside an advertising language of "magic," "time travel," and "history." Advertising reveals aspirational, imagined worlds—the way Canada ought to be rather than the way Canada is—that are in turn reflected back on everyday life. Cultural historian Jackson Lears opens his landmark book on the history of advertising by simply asking, "What do advertisements mean?" Advertising is as much about values as it is about selling stuff; the "unintended consequences of advertisers' efforts to vend their wares," Lears argues, is "the creation of a symbolic universe" of idealized social orders.[101] In the case of the twentieth century, the focus of this project, those social orders were about balance and control over time, over money, and over consumer choice about how to participate in global economies.[102] In this project, I extend these social orders further to examine "the nation" as both the thing advertised

[101] Jackson Lears, *Fables of Abundance: A Cultural History of Advertising in America* (New York: Basic Books, 1994), 3.
[102] Lears, *Fables of Abundance*, 11.

and the thing disrupted by advertising, especially since TCA was in the business of selling *places*, *services*, and *experiences*, not consumer goods. TCA was a state airline and employed advertising agencies strongly affiliated with the government. The material TCA and its advertisers therefore produced was not only the most conspicuous source of Canadian air travel discourse available to everyday Canadians, but also reproduced larger narratives about environments, technologies, and what it meant to belong in modern Canada.

There was no one person responsible for shaping TCA's discourse about air travel and modern Canada. Therefore, when I discuss "TCA" as an agent in this project, I refer to the entire suite of airline allies and boosters who both deliberately and inadvertently worked to build a coherent picture of what aviation in general and a state airline in particular was supposed to *do* for Canada: public-relations workers at TCA and the advertising agencies with which the airline worked, executives such as TCA president Gordon McGregor, in-house publishers and editors who wrote in-flight magazines and company publications, external newspaper- and radio-men such as John Fisher, and even sympathetic politicians such as Howe. This is also why I refer to the amalgam of advertising, promotions, speeches, reviews, newsletters, interviews, and publicity images "public-facing material." Some of this material was carefully curated and constructed—TCA's Advertising department, for example, had copy-writers and engaged in market research, and the airline's Press Office would draft multiple versions of press releases—but off-the-cuff remarks in Parliament, speeches at Rotary Clubs, and newspaper profiles of famous pilots or coverage of accidents *also* contributed to how TCA appeared to fit inside modern Canada. In this study, I work in particular with over 700 print advertisements produced by TCA and its advertisers destined for magazines, newspapers, and direct-mail campaigns. ("No wonder so few had taken up the challenge of reconstructing the attitudes and values of an era

from its ads!" historian Roland Marchand exclaims in his book *Advertising the American Dream*, and I am inclined to agree, despite working with only about 5% of the volume he did).[103] These advertisements, coupled with other promotional materials such as brochures, public-relations packages for travel agents, and press releases, tell a story about state agencies attempting to maintain something "solid" in modern Canadian national identity while the very thing they were meant to sell was gradually melting it into air.

The Structure of This Project

This dissertation is made up of five body chapters. They are arranged roughly chronologically, but are designed to be somewhat episodic and subsequently can be taken apart, re-arranged, and plugged in to one another to tell different stories about modern Canadian time, space, and place. In general, I am less concerned with the nuts-and-bolts study of the airplanes themselves or the organizational business history of TCA. Instead, this dissertation explores what the airline looked like to its public, how those appearances were constructed and received, and what they can tell us about the modern Canadian envirotechnical nation.

The first, "History, Geography, and Aerial Views," focuses on TCA's first decade of public-facing material. In it, I trace the process by which TCA was founded in Canadian Parliament and argue that it was deliberately assigned the same sort of transcontinental symbolism that rail had been two generations earlier. TCA's earliest promotional material manipulated time and space—transportation history and Canadian bigness—to position itself and its services as a natural conclusion to a national teleology that previously had ended with the

[103] Roland Marchand, *Advertising the American Dream: Making Way for Modernity, 1920-1940* (Berkeley: University of California Press, 1985), xvi.

hammering of the "last spike." The airline also emphasized the experience of flying by describing views from its aircraft as an authentic envirotechnical experience that only it could provide. Ostensibly a way to calm nervous passengers, the awe and wonder of the aerial view at TCA became a way that everyday Canadians could truly appreciate their nation's overwhelmingly large size.

The second and third chapters employ a narrative-counternarrative structure, modeled in David Nye's *America As Second Creation*, and focus on a single aircraft: the Canadair DC-4M North Star. The North Star was designed and built almost exclusively for the Canadian government (TCA and the Royal Canadian Air Force), and therefore provides insight into the place of aviation as a specific technological platform, rather than a nebulous symbol, in the modern Canadian envirotechnical nation. The narrative chapter, "The Canadair North Star and Seasonal Canadian-ness," looks at the technological and discursive creation of the North Star from TCA's perspective. TCA shaped the North Star—its first new postwar airliner and the first to incorporate a number of military-to-civilian diffusion technologies—as a unique Canadian technology designed for allegedly unique Canadian conditions. This was, as I show, in response to a flying public that was still apprehensive about air travel, which TCA connected in its public-facing material to Canadian mobility patterns shaped by the lore of its allegedly harsh winters. The airline designed advertising campaigns aimed at breaking what it saw as an unfounded belief that winters were less safe for flying, in turn destabilizing a century of discourse that linked travel in Canada to time in the form of seasons. The relative success of this constructed public persona of the North Star is the subject of the counternarrative, "North Star Failures and the State," in which I argue that for all its pointed publicity, the North Star was a failure. From outside the airline's perspective, the North Star appeared to be a poor choice for TCA's postwar

needs, both practical and cultural. First, the aircraft was expensive and took a long time to manufacture, making it a lightning rod for politicians already hostile to Crown corporations and government spending. Second, it was noisy and uncomfortable for passengers, making it difficult to sell as the guiding light for Canadian aviation in the second half of the twentieth century. Because of these political and technological failures, the North Star simply was not all it was advertised to be.

The fourth chapter, "Time, Space, and Sun Destinations," switches focus from *what* TCA flew to *where* it flew. As a further corrective to imagined Canadian fears of wintertime flying, TCA introduced new destinations starting in the late 1940s: Bermuda, various English- and French-Caribbean islands, and Florida. Nicknamed "sun destinations" in internal airline discourse, these places further removed everyday Canadians from their character-building seasons through publicity campaigns that encouraged passengers to exchange winters for summers. The North Star was the agent by which summers and winters were overturned, and advertising for "sun destinations" manipulated time to not only remove Canadian winters as an obstacle to mobility, but to separate "winter" and "summer" from the calendar entirely. Once time in the form of seasons was exclusively a construct in TCA's discourse, it was much easier to get passengers to buy in to the extreme time-space compression of its aircraft. This argument carries over to my final chapter, "Four Short Stories About Jets." It is one of the four episodes about TCA's jet age services that I cover; the others highlight TCA's first turbine-powered aircraft, the introduction of "full jets" and their accompanying airport infrastructure through the early years of the 1960s, and the development and advertising of "ReserVec I," the world's first real-time computerized airline reservations system. These "short stories" all show the fragmentation of TCA's publicity in terms of both messaging and literal corporate organizational

structure, as well as the difficulty in maintaining the airline's carefully crafted discourse of nature, technology, and nation into the jet age. They also trace four themes which appear throughout the previous four chapters: TCA's introducing new technologies as particularly "Canadian" (or not), air travel as a high-modern megaproject, the relationship between business and the state, and the links between climate, seasonality, mobility, and belonging. This culminates in the airline changing its name to Air Canada in 1964, which is the subject of the dissertation's conclusion. Despite TCA's best efforts, air travel did not replace rail as the locus for twentieth century envirotechnical nationalism, and therefore being "Trans-Canada" did not mean what it once did.

1. History, Geography, and Aerial Views

Trans-Canada Air Lines turned ten years old on April 10, 1947, but the airline did very little to celebrate.[104] Passengers on flights that day received what *Between Ourselves* called a "generous cut" of birthday cake "in a neat little silver box," cut by the "smallest and largest passengers leaving Montreal": a seven-year-old-girl and a famous wrestler called "Da Preem." Other than that, a few more cakes sent to mayors of major hub cities, and a celebratory luncheon for TCA managers thrown by a transport company in Saskatchewan, "the birthday passed almost like any other day," with little public fanfare at the airline.[105] Outside TCA, boosters such as John Fisher used the anniversary as an opportunity to highlight how commercial aviation in general, and TCA in particular, had a tradition of serving Canada's best interests. In a characteristic "pride-builder" report on the subject, he highlighted TCA's new transatlantic routes, its newest airliner, the Canadair DC-4M North Star, and its overall effect on Canada:

> "You'll never learn from TCA that the best record for flying in the world was made in a tough northern country of hard winters...Thursday is the Tenth Birthday. Greetings to the...men and women who have carried the Maple Leaf high and far. You have helped give Canada a feeling of nationhood."[106]

What exactly did TCA, as a state airline, do to help give Canada a "feeling of nationhood?" And was that "nationhood" different in 1947 than it was a decade or century prior? This chapter will

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[104] An earlier version of this chapter appeared as "'One-Day-Wide' Canada: History, Geography, and Aerial Views at Trans Canada Air Lines, 1945-1955," *Scientia Canadensis* 40:1 (2018): 19-43. Many thanks to editors Will Knight and Dan Macfarlane, and the anonymous peer reviewers, for their feedback.

[105] "Tenth Birthday Celebrations," *Between Ourselves*, May 1947, 4. The *Globe and Mail* reported that the mayor of Toronto received the same sort of cake that passengers that day did. "TCA Marks Birthday," *The Globe and Mail*, April 11, 1947.

[106] "John Fisher Reports," April 6 1947, C. D. Howe fonds, MG27 B20, volume 94, LAC.

explore TCA's public-facing material from in and around its decennial year and its implications for Canadian envirotechnical identity.

The tensions between Canadian environmental and technological nationalisms, and TCA's responses to them, were rooted in TCA's very existence as a state airline and its self-fashioning during and after the Second World War. TCA engaged with modern and high-modern approaches to "space" and "time" as a way to balance popular narratives of Canadian geography and history with selling its space-shrinking services. Manipulating "space" and "time" to elide the tensions between environment and modern technology helped TCA's advertising and promotional material place airplanes as part of an established timeline of transportation technologies, providing the machines themselves with a teleology connected to mythic Canadian distances. This had the added effect of turning TCA into the exclusive purveyor of what airline advertisers saw as an authentic Canadian envirotechnical experience: viewing the nation from above. Passengers were sold a vision of Canadian geography that suggested that the only way to truly appreciate the scale and variability of the nation was to see it from an airplane window.

This chapter will be divided into four major sections. The first will introduce a basic history of TCA's first decade as an airline, from its founding by Act of Parliament to its 1947 decennial celebrations (or lack thereof). There, I will discuss the support for and criticism of founding a state airline in Canada and will trace some of the personnel and organizational changes that make the period under study unique in terms of TCA's self-fashioning. The next two sections will examine two discrete but related trends in TCA's promotional material during and immediately after the war: discursive manipulations of *space* and *time*. TCA worked with "time" and "space" as high-modern categories under the guise of "history" and "geography"; Canada's history and character-building distances were assigned a great deal of elasticity and

were stretched, shrunk, and folded into themselves as the need arose. Canada was transformed from a land of impossible distances to being only "one day wide" because of TCA's services, but even then, those distances were enrolled as part of Canadian history to make TCA a natural part of the Canadian transportation landscape. Finally, I will look at a specific feature that was the focus of a substantial part of the airline's early publicity—aerial views of Canada—which TCA constructed as a part of the modern Canadian technological experience that only it could provide.

A Brief History of TCA

At the end of the 1920s, aviation in Canada took two related forms: "bush flying" for the purpose of surveying, fire-fighting, and equipment, medical, and personnel transport in the parts of Canada sparsely populated by settlers, and airmail. Airmail, "the first means of adapting aviation technology to the task of nation-building," greatly interested the Canadian government, but the task of actually flying the mail was undertaken by a jumble of private and partially subsidized enterprises.[107] One of those, Manitoba grain entrepreneur James Richardson's Western Canadian Airways (later Canadian Airways Limited), came to control over three-quarters of Canadian civilian aviation by the time the Depression hit. His network stretched from the Pacific as far east as New Brunswick and well into the Northwest Territories, but there were gaps which became apparent when Richardson won a contract with the post office in 1930. There were no east-west routes crossing the Precambrian Shield or Rocky Mountains; air mail moving west to Winnipeg had to enter the American airmail system at Detroit and then resurface in

[107] Ian MacLachlan and Bruce MacKay, "Lethbridge and the Trans Canada Airway," *Alberta History* 48:3 (2000): 3.

North Dakota, and mail going to Vancouver or Victoria was delivered via Seattle.[108] Some legislators were troubled by these gaps and interpreted them as a potential threat to national security, and in 1929 Parliament began discussing how to best build a coast-to-coast air network.

The trans-Canada Airway, as that network came to be known, was imagined as a series of stations sustaining a continuous radio signal from Toronto (and eventually further east) to Vancouver. It would, in aviation historian Peter Pigott's words, "overcome this country's vast geographical barriers, thwart the Americans, reassure the British, and unite the country."[109] The Airway was part of a coordinated effort by the federal government through first few decades of the twentieth century to centralize and unite a geographically scattered nation through state-supported communications infrastructure such as banking, broadcasting, and regulation.[110] Landing fields and airports in Quebec, Ontario, Manitoba, and British Columbia were constructed as Depression relief projects, employing thousands of workers. A few years later, Canadian pioneer aviator John McCurdy would call this project "the most useful public works ever devised in the Dominion."[111] The completed Airway would stretch over 3,300 miles, including a sideline north from Lethbridge to Edmonton, allowing pilots to fly "on the beam" by

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[108] Pigott, *National Treasure: The History of Trans Canada Air Lines* (Madeira Park: Harbour, 2001), 3-5. Pigott has also written a biography of Richardson and Canadian Airways Ltd, *Wingwalkers: The Rise and Fall of Canada's Other Airline* (Madeira Park: Harbour, 2003).
[109] Pigott, *National Treasure*, 2.
[110] The Bank of Canada was chartered in 1934, the Wheat Board in 1935, and the CBC in 1936. The Bell Telephone Company of Canada had a monopoly on both telephone service and telephone manufacturing, as it held key patents, and is often used as a key example of Canadian monopoly-driven approaches to public utilities. See Rob MacDougall, *The People's Network: The Political Economy of the Telephone in the Gilded Age* (Philadelphia: University of Pennsylvania Press, 2014); Christopher Armstrong and H. V. Nelles, *Monopoly's Moment: The Organization and Regulation of Canadian Utilities, 1830-1930* (Philadelphia: Temple University Press, 1986); Jean-Guy Rens, *Invisible Empire: A History of the Telecommunications Industry in Canada, 1846-1956* (Montreal and Kingston: McGill-Queen's University Press, 2001).
[111] John McCurdy, "The Most Air-Minded Nation on Earth," *The Rotarian*, December 1941, 26.

following looped Morse signals of "As" and "Ns."[112] Richardson expected Canadian Airways Limited to be the sole operator on the new network, but Prime Minister R. B. Bennett cancelled Richardson's lucrative air mail contracts in 1932, bringing the airline near insolvency. Richardson continued to lobby for a role in the developing Airway in the hopes that "ultimately we would be accorded some recognition for our accomplishments in opening up the country."[113] His lobbying grew more hopeful as Bennett was replaced as Prime Minister by Liberal William Lyon Mackenzie King in 1935. Over the next few years, Richardson gradually clawed his way back into some airmail contracts and made some expensive aircraft purchases, including the Lockheed 10A "Electra" aircraft that would make up Trans-Canada Air Lines' first fleet, but it was not enough to cement his role as the sole operator of the twentieth-century version of transcontinental Canadian rail.

The construction of the Airway and related civilian aviation developments occupied the minds of parliamentarians through the mid-1930s, especially in terms of its role in nation-building. Investing in aviation, according to Vancouver Member of Parliament H. C. Green in a 1936 House of Commons debate, was "sound national development for Canada" which would make Canada "a great northern nation, not a vest pocket edition of the United States of America." He and other air-minded parliamentarians urged for what was frequently called an "active" or "bold air policy," which involved increased investment in the Airway, the establishment of an airmail service, a commercial airline, or both, and support of a homegrown

[112] McLachlan and MacKay, "Lethbridge and the Trans Canada Airway," 7.
[113] Quoted in Nerbas, *Dominion of Capital*, 215. According to Pigott, Mackenzie King saw parallels between Richardson's indiscriminate toadying to whichever government was in power and the political corruption that had accommodated the overbuilding of Canadian railways. Pigott, *National Treasure*, 10-11.

aviation industry in general.[114] Green reasoned during a debate on the 1936 budget that federally-supported aviation would accomplish two related goals:

> "In the first place I am sure it will help draw the provinces closer together...After all, during the depression the provinces have been hard hit and there have been many rumblings, many questions asked as to whether or not confederation was worth while [sic]. I think we must remember that it is our duty here in parliament to do everything possible to hold the provinces together.
>
> I am also interested because I do not think anything will do more to strengthen the morale and raise the spirit of our people than to make Canada a leader in aviation...Look at our background in aviation. In the war we had a far higher percentage of pilots in the air force than any other part of the empire...That is the background of Canada in aviation, and we also have the deeds that have been done by our fliers in the north. There is no reason why we should not go ahead and lead the world in aviation."[115]

Green's reasons for federal control of commercial aviation development echo the pleas made by nineteenth-century railway boosters. He saw a technological network as a way to prevent the provinces from drifting apart, especially given that his riding was located at the westernmost edge of Canadian settlement. With a slight tense change—"confederation *will be* worthwhile" instead of "was worthwhile"—the first part of his speech would not have been out of place seventy years earlier. A transcontinental "confederated" nation, as I suggested in the

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[114] To be "air-minded," a term popular in the interwar years, was to follow aeronautical developments and embrace the potential of aviation to better human life, a sort of part-technological part-spiritual aviation boosterism. See in particular Joseph Corn, *The Winged Gospel: America's Romance with Aviation* (Oxford: Oxford University Press, 1983), 51-70.

[115] Canada, *House of Commons Debates*, May 11, 1936 (H. C. Green), http://parl.canadiana.ca/view/oop.debates_HOC1801_03/656?r=0&s=1. Canada's first Confederation, on 1 July 1867, only included Ontario, Quebec, New Brunswick, and Nova Scotia. The remainder of the provinces joined Confederation at various times between 1870 and 1905, (except Newfoundland in 1949) which meant for many, especially those in the prairie and Western provinces, Confederation was still very much in living memory.

introduction, was only imaginable to Confederation-era intelligentsia because of homegrown techno-science, including the railways and "inventory sciences" such as geology and earth magnetism. "Homegrown" is the key here, as Green also imagined that state-supported aviation would encourage a techno-scientific skillset for which Canadians already seemed well-suited, given their performances in war and in the North.

Air travel was clearly the future, as Green and other air-minded politicians argued, but airlines were expensive and time-consuming undertakings. On one hand, it would have been wasteful to pass the Airway, which had cost the government nearly $8 million to build, on to private enterprises. On the other, civilian air travel in Canada was still relatively untested. Should the risks and rewards fall to the federal government, even though private companies such as Richardson's already had a great deal of experience? Minister of Transport C. D. Howe, arguably Canada's most air-minded parliamentarian and the architect of the *Trans-Canada Air Lines Act*, believed so. He compared two popular airline models—the private "somewhat chaotic experience" in the United States and the more subsidized British Imperial Airways model—and decided that the new company was to be organized as a private corporation underwritten by the publicly-owned Canadian National Railways. That is, the government would determine the size, shape, and function of the new corporation, but smaller-scale contracts and day-to-day operations would fall to the CNR, which could pass 49 per cent of shares to private enterprise.[116] Its board of directors would be made up of CNR railwaymen and appointed public servants, and, most importantly, would give TCA a virtual monopoly on commercial air transport in Canada.[117]

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[116] Canada, *House of Commons Debates*, March 22, 1937, (C. D. Howe), http://parl.canadiana.ca/view/oop.debates_HOC1802_02/1006?r=0&s=1.

[117] No other airlines could fly on domestic routes on which TCA flew and TCA would also get first choice of international routes. For a brief overview of the TCA Act and the structure of early

Howe rushed the bill through Parliament at the end of March and beginning of April 1937—the speed is generally considered by analysts to be an idiosyncrasy of Howe's rather than due to political machinations—and critics were quick to notice the parallels with rail development. Some, like Toronto-area MP Thomas Church, saw the CNR as not public enough, even "anti-public," worrying that the government would simply "put up the money" with no control over the outcome. "They are going to launch this system with its high-sounding name, Trans-Canada Air Lines, and what will happen after that? Parliament...has nothing to do with it at all," he argued at a reading of the bill.[118] Furthermore, critics saw TCA's connection with the "debt-ridden and universally derided" CNR as a hint that it would suffer the same fate as rail: speculation, overspending on unnecessary routes, political corruption and favoritism, and nonstop consolidations, buyouts, and bankruptcies.[119] Interestingly, Howe's interlocutors in debates on the bill consistently asked him about international, transatlantic, trans-Pacific, and northern routes and he had to keep reminding the House that the new airline was designed to fly on the Airway; "after all, that is the most important feature."[120] In general, it appeared that TCA was to do much of the same province-binding, techno-science-encouraging work that rail had done, but incorporating the lessons learned from it. Richardson and Canadian Airways Limited were essentially written out of the airline and Airway. Pigott suggests that this was likely

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TCA, see C. A. Ashley, *The First Twenty-Five Years: A Study of Trans-Canada Air Lines* (Toronto: MacMillan, 1963), 5-12; Pigott, *National Treasure*, 24-29.

[118] Canada, *House of Commons Debates*, March 22, 1937 (Thomas Church), http://parl.canadiana.ca/view/oop.debates_HOC1802_02/1008?r=0&s=1. In a tirade as angry as Canadian parliamentarians get, Church also questioned whether Howe had ever even "been up in the air" and asked if he would "trust these airships"; Howe had and did.

[119] Philip Smith, *It Seems Like Only Yesterday: Air Canada, the First 50 Years* (Toronto: McClelland and Stewart, 1986), 50.

[120] Canada, *House of Commons Debates*, March 22, 1937 (C. D. Howe), http://parl.canadiana.ca/view/oop.debates_HOC1802_02/1009?r=0&s=1.

because Richardson's toadying to whichever party was in power reminded Mackenzie King of railway corruption, hint at the state's desire to do transcontinentality differently by air.[121]

This would all depend, however, on "how airminded the people of Canada become," as Toronto-area MP Denton Massey argued in early April. Massey wondered how much advertising "of a certain definite and specific nature" would be necessary to convince Canadians of the safety, reliability, and convenience of air transport, but he was quickly dismissed by Howe as "underestimat[ing] the airmindedness of the Canadian people."[122] The pre-existing advertising infrastructure at the CNR was an added benefit, Howe suggested, because the railway was already poised to undertake any advertising campaigns if necessary. This exchange hints at an early, if small, concern with selling the idea of air travel to Canadians. Of course, Massey's claim that Canadians needed convincing to fly and Howe's assertion that they did not point to one of the main issues addressed in this dissertation; Canadians needed to be encouraged to take to the air, and they also needed to be encouraged to see aviation as a technological creation story necessary to their existence as a modern nation.

After two weeks of debate, the *Trans-Canada Air Lines Act* was passed on 10 April 1937; as head of the CNR, Manitoba railway manager Samuel J. Hungerford became the airline's first president.[123] Discursively, the airline was oriented along the same east-west axis as rail, clearly influenced by the same sorts of calls to technological nationhood from half a century earlier. The name "Trans-Canada Air Lines" is an obvious expression of this. TCA was not just "Canada," as Canadian Airways was, but it was *Trans*-Canada, encompassing the whole of the territory and

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[121] Pigott, *National Treasure*, 10-11.
[122] Canada, *House of Commons Debates*, April 1, 1937 (Denton Massey, C. D. Howe), http://parl.canadiana.ca/view/oop.debates_HOC1802_03/409?r=0&s=1.
[123] "Trans Canada" was usually hyphenated into "Trans-Canada," and "Air Lines" was sometimes one word. For consistency I will be using "Trans-Canada Air Lines" throughout.

knitting far-flung population centres together. As far as I can tell, Howe chose the name himself and included it in the initial wording of the *Trans-Canada Air Lines Act*: that "it is expedient to introduce a measure to incorporate a corporation to be known as trans-Canada air Lines with authority to establish and operate air lines and services across Canada."[124] However, the realities of existing in Canada in the late 1930s meant that TCA was more Atlantic- and USA-facing than transcontinental. The airline began service on September 1, 1937, after Richardson, "accepting the inevitability of it all," sold his two 10-passenger Lockheed Electra aircraft to TCA and turned over what would be TCA's first route: Vancouver-Seattle.[125] The airline only began flying passengers from Montreal to Vancouver in March 1939, with intermediate stops in Ottawa, Toronto, North Bay, Kapuskasing, Wagaming, Winnipeg, Regina, and Lethbridge, and began testing flights north to Calgary and Edmonton and east to Moncton by the end of the year.[126] As the *Ottawa Journal* reported in late 1939, only after the establishment of the Moncton leg and the finalization of a route from Moncton to Halifax could "the Trans-Canada" achieve "the proud ambition expressed in its name."[127]

However, true transcontinentality and all the rhetorical fanfare it deserved would have to wait.[128] TCA's passenger expansion was derailed by the outbreak of war. This began with a

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[124] Canada, *House of Commons Debates*, March 22, 1937 (C. D. Howe), http://parl.canadiana.ca/view/oop.debates_HOC1802_02/1005?r=0&s=1.
[125] This was the same type favoured by American long-distance pilot Amelia Earhart, who went missing over the Pacific Ocean in a 10-A Electra in 1937. They gained a reputation at TCA for attracting lightning strikes because of exposed communications antennae on the undercarriage; TCA recorded at least nine between 1938 and 1947. Pigott, *National Treasure*, 29, 62.
[126] Ashley, *The First Twenty-Five Years*, 14-15.
[127] V.M.K., "Trans-Canada Air Lines Playing Important Part in Dominion Transportation," *Didsbury Pioneer*, November 30, 1939.
[128] Service to Halifax was established in 1941, but passengers had to fly the last twenty minutes with blackout curtains to avoid seeing the military ships in the harbour. Pigott, *National Treasure*, 127. By mid-1942, TCA was carrying mail as far west as Victoria and further east into Cape Breton island and into Newfoundland, which was not yet a Canadian province.

major change in personnel, as Manitoba lawyer and TCA board member Herbert J. Symington, who Howe affectionately called "Herbie," became the airline's first standalone President in 1941.[129] The airline itself mobilized quickly for the war effort. To become what an early leaflet called "a swift and efficient public servant," the machine shops at Winnipeg doubled in capacity to aid Royal Canadian Air Force (RCAF) instrument repair, and a new shop was built in Malton, Ontario under contract with the Department of Munitions.[130] Some TCA airfields were repurposed as British Commonwealth Air Training Plan (BCATP) stations and personnel enlisted as pilots, engineers, clerks, and support workers of all sorts. Troubled by the transatlantic experience the British Overseas Airways Corporation (BOAC, essentially TCA's British counterpart) was gaining by shuttling personnel and supplies to these Canadian training fields, as well as the volume of mail piling up at Canada House, Howe proposed a similar service be developed at TCA.[131] In "TCA's transatlantic summer" of 1943, the Canadian Government Trans-Atlantic Air Service (CGTAS), operated by TCA on behalf of the government, began flying military mail and personnel across the Atlantic.[132]

Although it was not a direct or permanent part of TCA, this service did two important jobs for the airline. First, setting aside the practical experience gained by the airline and its personnel, operating the CGTAS re-oriented the airline towards the Atlantic. The high-minded nationalistic sea-to-sea rhetoric of TCA's founding fell by the wayside as the war effort occupied national discourse. TCA contributed on the home front as well, "speeding men, machine parts, tools, blueprints, specifications, orders, documents, blood plasma, serum and all the other essentials of

[129] Nerbas, *Dominion of Capital*, 201.
[130] Brochure, "Skyway Across Canada," c. 1941, Air Canada Collection 005.003, CASM.
[131] "Canada House" is the name of the Canadian high council in the United Kingdom.
[132] Peter Pigott, *Air Canada: The History* (Toronto: Dundurn, 2014), 29-32.

a war-time society to points of urgent need," as one wartime publicity document pointed out.[133] These home-front contributions paired with the volume and cultural value of the news and personal letters the CGTAS carried helped merge TCA's unite-the-nation discourse with patriotic war rhetoric. The second job it did was normalizing flying across the Atlantic in general, as Sean Nicklin has recently argued, giving "transatlantic civil flight a major boost." The necessities of war had transformed the North Atlantic "from a dangerous frontier to a highly developed air corridor"; the airplane was forced to be viable alternative to the steamship and state and subsidized airlines that had participated in ferry service such as TCA were primed to reap the benefits.[134]

Those benefits did not come easy to TCA, which faced both operational and systemic challenges at war's end. The aircraft used by the CGTAS, modified Avro Lancaster bombers known as "Lancastrians," were ill-suited to passenger flight. Stripped to their bare bones in order to carry as much mail as possible, Lancastrians were noisy, shaky, unreliable, and accident-prone. Because they had to be filled to the brim in order to make the trip across the ocean, the fuel tanks tended to slosh everywhere, making everything especially flammable. Even the electricity necessary to operate the radio had the potential to spark and cause a fire. Ferry Command pilot George Lothian, who served with TCA before and long after the war, recalled in his memoirs "a din that could only be compared to a boiler factory," a heating system that either fried or froze the crew, and makeshift urinals.[135] They weren't much better once permanently

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[133] Draft, "Trans-Canada Air Lines: Questions and Answers," 29 November 1945. Air Canada fonds RG70, Office of the President Papers, vol. 5, LAC.
[134] Sean Nicklin, "Hopping the Pond: The Normalization of North Atlantic Civil Aviation from its Origins to the Rise of the Jumbo Jet, 1919-1970" (PhD diss., University of Ottawa, 2016), 104.
[135] George Lothian, *Flight Deck: Memoirs of an Airline Pilot* (Toronto: McGraw-Hill Ryerson, 1979), 110. Pigott, *Air Canada: The History*, 32.

adapted for postwar civilian flight. Onboard toilets were infrequently available, and passengers "cannot...look out the windows in a downward direction without rising from their seats," as a reporter wrote for the British *Flying* magazine in 1945. Lancastrians also did not have the range for a transatlantic flight without a fuelling stop in Newfoundland, creating further disruptions and potential unpredictability. They simply weren't designed for repeated long-haul flights, and were therefore the first casualty when TCA officials began looking towards the airline's postwar civilian travel needs. The "big lesson" to be learned from the Lancastrians, *Flying* magazine suggested, "is that each aircraft must be designed for the specific purpose for which it is intended."[136] The general conclusion at TCA was that the Lancastrians were a useful stop-gap measure, but unsuitable for regular, reliable, postwar civilian transport, especially given the assumed increase in passenger traffic at the end of the war. TCA's eventual replacement for the Lancastrians, the Canadair DC-4M North Star, began flying the Atlantic in 1947 and is the subject of Chapters 2 and 3.

The airline also had to face emerging mid-century paradigms of mobility. Canada's involvement in the war effort had split families across the ocean, and these cultural and social ties with Britain pulled relatively quick and accessible transatlantic travel back into the spotlight, much as it had been at the end of the nineteenth century and after the first World War.[137] TCA aircraft carried war brides, war babies, orphans, and immigrants to Canada through the mid- and

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[136] "The Lancastrian," *Flight*, February 1, 1945, 118-122.

[137] Cecilia Morgan has argued that the middle-class experience of transatlantic tourism was a mechanism by which English Canadians reckoned with nationhood, empire, modernity, and war. Cecilia Morgan, *A Happy Holiday: English Canadians and Transatlantic Tourism, 1870-1930* (Toronto: University of Toronto Press, 2008). At TCA, uniting the products of the baby boom with British grandparents they had never met was common advertising theme through the 1950s and 1960s.

late-1940s, making air travel appear necessary for the postwar return to normalcy.[138] On the home front, TCA grew alongside a surge in automobility and a new form of publicly-funded transcontinentality: the Trans-Canada Highway. Proposed as the war was ending, the Highway was announced in stages starting in 1947 to respond to the same concerns proponents of the trans-Canada Airway were addressing ten years earlier. Motor vehicles traveling from Toronto to Vancouver (and points between) had to cross into the United States, which one MP considered "preposterous"; it was imperative "that we have good highways in these modern times."[139] Although the Trans-Canada Highway was not direct competition for TCA, especially since it took thirty years to complete because of a lack of federal-provincial cooperation, it hints that the "democratized" mobility represented in postwar car travel was alive and well in Canada. It also suggests that there was still room for the symbolic value of sea-to-sea communications, despite the dampening effect of the war. Much like rail and early long-distance telephony, Canadians were generally not interested in driving from the Atlantic to the Pacific; it was the fact that they *could* that mattered.[140]

These new—and old—ways of thinking about mobility in Canada were accompanied by another set of organizational changes at TCA. An amendment to the *Trans-Canada Air Lines Act* in 1945 allowed the corporation to set up subsidiaries, the first of which was "Trans-Canada Air Lines (Atlantic)." Designed to take some of the financial burden off the airline as it expanded its transatlantic (and later Caribbean) services and to seamlessly take over the CGTAS, TCA

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[138] In particular, TCA brought nearly 10,000 of immigrants to Ontario in the Ontario Air Immigration plan in the late 1940s. See Chapter 3.
[139] Canada, *House of Commons Debates*, August 27, 1946 (John Probe), http://parl.canadiana.ca/view/oop.debates_HOC2002_05/861?r=0&s=1.
[140] They still aren't. I mean, why would they want to? For the Trans-Canada Highway, see David Monaghan, *Canada's New Main Street: The Trans-Canada Highway As Idea and Reality, 1912-1956* (Ottawa: Canada Science and Technology Museum, 2002).

Atlantic turned out to be a disaster for the airline as we will see in Chapters 2 and 3. On the personnel front, CGTAS pilots and crew, including George Lothian, returned to full-time TCA service, and a number of RCAF servicepersons joined TCA as pilots, engineers, and ground and cabin crew. One of those was Anglo-Montrealer Gordon R. McGregor, who joined TCA in 1945. McGregor was a decorated amateur pilot and Bell Telephone Company manager and engineer before the war, was the oldest and top-scoring Canadian pilot in the Battle of Britain (with five victories credited and at age 38). In his memoirs, McGregor remembers writing to Hungerford in early 1937, when there was "talk of a new airline being formed," to say that "my work and my hobby have combined to make me of more value to...air transportation than any other field of endeavour." After the war, he told Bell of his "expressed inability to resist the temptation to have some part in the rapid development of air transportation sure to take place in the coming years," and left to become TCA's "General Traffic Manager"; the airline had essentially split into "Operations" and "Traffic" departments to meet both rising passenger volume, which had doubled between 1944 and 1946, and increased fleet capacity.[141]

Meanwhile, TCA turned ten. It is unclear why there was so little celebration.[142] In general, advertising and self-promotion were not a terribly high priority at TCA in the first few years after the war, but a major anniversary seems like a natural promotional opportunity that the airline did not capitalize on. Perhaps it was because the founding of the airline and the fulfilment of its mandate were separated by several years; TCA did provide another birthday cake for passengers flying on the tenth anniversary of the first Vancouver-Toronto flight in 1948. Perhaps also it was because the airline did not want to draw attention to itself as it struggled to expand its

[141] Gordon McGregor, *The Adolescence of an Airline* (Montreal: Air Canada, 1980) xii-xiii.
[142] The *Globe and Mail* ran the rather underwhelming headline "TCA Marks Birthday" on April 11, 1947.

passenger capacity, respond to a series of publicized accidents, maintain regularity during two particularly harsh winters, and keep North Star construction on schedule.

A major concern during TCA's ninth and tenth years was the airline's apparent inability to show the public that it was improving its fleet and infrastructure to meet postwar Canada's needs. "The war magnified our responsibilities manyfold and at the same time paralyzed much of our ability for compensatory expansion," claimed an article in an early 1947 employee newsletter, "[and] today we inherit the legacy of those critical days."[143] These struggles were alarming to TCA executives, and as Traffic Manager, McGregor was asked through 1946 and 1947 to explain why the Canadian public looked so unfavorably on TCA and what the airline could do about it.[144] McGregor saw TCA's "continued inability to cope with the present volume of potential air travel" as the major culprit in "public antagonism towards the Company" and recommended a series of public articles that would "avoid any note of apology" but would explain the that situation was out of TCA's control and was being remedied.[145] These piecemeal public-facing materials were gradually replaced by what McGregor called "a sustained and comprehensive program of advertising," especially once he replaced Symington as President in 1948.[146] Given his previous experience in the traffic department, he focused on transforming the commercial side of TCA "from an order-taking department to a sales department actively stimulating business" through advertising, promotions such as fare plans, and increased booking

[143] "Our Courtship of Service," *Between Ourselves*, January 1947, 4.
[144] Vice President W. F. English used the term "disappointing" in his November and December 1946 and January and February 1947 monthly reports to Symington.
[145] Letter from Gordon McGregor to W. F. English, "Publicity," 4 July 1946, Air Canada fonds, RG-70, vol. 5, LAC.
[146] Letter from Gordon R. McGregor to W. F. English, "Decline in Volume of Passenger Traffic," 7 December 1946, Air Canada fonds, RG-70, vol 5, LAC.

capacity.[147] By early 1949, TCA's Advertising department had expanded so much that it separated from the airline's Public Relations umbrella; this expansion will be discussed in more detail in Chapter 2.[148] McGregor served as TCA president until 1968 and retained an interest in passenger relations throughout, appearing on radio shows, giving public addresses, and even responding personally to passenger complaints.[149]

Transatlantic Travel, Canadian Crossings, and the Uses of History

Just before and as McGregor took office, TCA began promoting two new aspects of its service: the debut of regular passenger flights between Canada and the United Kingdom, and the North Star, TCA's first new postwar airliner. Although I will not discuss the North Star in detail here—it is the subject of the next two chapters— its recognizable image and evocative name featured heavily in promotional material, especially as it was used on TCA's new routes. Built at the Canadair plant in Cartierville, Quebec, it combined the American Douglas DC-4 troop transport fuselage with four British Rolls-Royce "Merlin" engines, and featured a number of military-to-civilian transfer technologies such as cabin pressurization, long-range navigation, tricycle landing gear, and electric de-icing. Its Canadian manufacture in particular was celebrated as symbolic of national engineering prowess, industry, and air-mindedness. Just like its namesake, the North Star was to be the guiding light for the next generation of air transports.

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[147] Gordon McGregor, *The Adolescence of an Airline*, 36.
[148] The airline published some advertisements before McGregor took office, but they were infrequent and rather general in tone. TCA did create other sorts of public-facing material, such as brochures and public talking points for travel agents and airline officials.
[149] In January 1951, a passenger filled out a comment card and suggested "firing McGregor." McGregor sent him a letter a week later saying that "while there is no problem about firing McGregor—and his life span would probably be increased by such a move," the airline would be unable to fulfil his suggestion at that time. Letter from Gordon McGregor to Aubrey Salter, 30 January 1951, Air Canada fonds, RG-70, vol. 135, LAC.

TCA's transatlantic flights are the focus of this section, as promotions for this service incorporated many of the history-and-geography themes that carried through TCA's public-facing material in this period.

TCA began regular commercial flights to London and Prestwick on non-pressurized North Stars in 1947, and promotions for the new service made liberal use of the themes of time-space compression by invoking a deep history of transatlantic travel using symbols of exploration and discovery.[150] In flying across the ocean, the North Star represented the future of oceanic travel and the final step in a progress narrative that began with "the Vikings...in their little dragon ships," as they were called in 1947 promotional copy. The Vikings were followed by "the coming of Cabot" and Jacques Cartier, the steamship Royal William "and her queer cargo," and John Alcock and Arthur Brown's 1919 transatlantic flight in a "tiny biplane" that looked "like a frail box-kite." TCA's "great new aircraft, the North Star," was imagined as the heir to these great exploratory traditions, carrying future generations of oceanic travellers with ease since "after a thousand years, the wide ocean has been reduced to a narrow pool."[151]

The wide-ocean-narrow-pool transformation was evocative not necessarily of Canadian rail but another harbinger of time-space compression: steamship travel. Through the nineteenth century, advances in steamer technology, such as surface condensers to assist reliable operations in salt water, made travel across the Atlantic increasingly easy and comfortable, and steamship velocities increased sevenfold between approximately 1800 and 1900.[152] Contemporary commentators pointed out how the world's oceans and rivers "have contracted their streams to

[150] For more on the North Star, see Larry Milberry, *The Canadair North Star* (Toronto: CanAv Books, 1982).
[151] Brochure, "North Star over the Atlantic," 1947, Air Canada Collection 005.003, CASM.
[152] Warf, *Time-Space Compression*, 105.

infinitely less than half their lengths and breadths, and the great lakes of the world are rapidly drying into ponds!"[153] Calling the Atlantic "the pond," as in "hopping the pond," allegedly dates from this period as well, discursively reducing the distance between Europe and the Americas. By 1900, high-powered steamships could cross the Atlantic in five days and pleasure travel became an important source of revenue to the North American and British steamer industries.[154] Historian Cecilia Morgan has shown how traveling on Canadian steamship lines was a point of pride for tourists, helping them to feel "truly part of an international and technologically sophisticated community."[155] Crossing the ocean by steam as a tourist was a tangible way in which the world seemed "smaller," especially when traveling between the Dominion and its metropole, and allowed middle-class Canadians to participate in what felt like the progressive march of technological modernity.[156]

TCA's promotions for transatlantic travel also made the modern compression of space and time central to technological and historical progress by incorporating regularly scheduled airliner travel into the canon of exploration and adventure. Other transatlantic "firsts" had taken place between Alcock and Brown and the North Star, such as Charles Lindbergh's solo flight in 1927. Other regularly scheduled trips across the Atlantic had existed too, such as commercial steamship services and the CGTAS. But still TCA led with comparisons to Jean Cabot instead of the Lancastrian, which would have made an obvious choice and still would have reflected

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[153] Quoted in Wolfgang Schivelbusch, *The Railway Journey* (Berkeley: University of California Press, 1986), 10.
[154] Warf also argues that reductions in shipping costs and postal rates further contributed to perceptions of compression. Warf, *Time-Space Compression*, 107-108.
[155] Morgan, *A Happy Holiday*, 36.
[156] In her study of Anglo-Canadian tourist diaries, Morgan does not identify any writers who explicitly discussed the feeling of compression; most were just happy to get to dry land.

favorably on the North Star.[157] The overall effect of this tactic was one of multiple temporal accelerations. Not only did transatlantic travel times reduce drastically with each technological system from Cabot's seven weeks to the Royal William's 25 days to the North Star's 14 hours, but the time between each transportation also accelerated. Approximately five hundred years passed between the Vikings and early modern explorers, three centuries between Cartier and the Royal William, and 86 years between the first steamship and air crossing. "In a millennium, eighty-six years is little more than the tick of the clock," making the three decades between Alcock and Brown and the North Star even more impressive.[158] This double-acceleration made time appear especially elastic, placing the Vikings, great explorers, and aviation pioneers both very near to and very distant from TCA and its North Stars. TCA passengers were only a few steps removed from the Vikings, but each step was a longer jump into the past.

Furthermore, pushing the North Star's lineage as far back as the Vikings provided airplanes with a history, which they lacked as a quintessentially modern technology. As Bernhard Rieger has shown for nineteenth- and early-twentieth-century Europe, many anxieties about modern technologies were rooted in their relative complexity and how they appeared to "burst into the present from nowhere."[159] The overwhelming size of luxury ocean liners, locomotives, airliners, and other "modern wonders" made it difficult for consumers to place them into already-established paradigms of technology, place, and mobility. Airplanes in particular had the dual problem of being so complex that their manufacturing processes were black-boxed to the average consumer and going against the forces of nature by flying. Like other

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[157] TCA's promotional material did occasionally compare the North Star with the Lancastrian in transatlantic advertising, but not with the same fervor and only when copy space allowed.
[158] Brochure, "North Star over the Atlantic," 1947, Air Canada Collection 005.003, CASM.
[159] Bernhard Rieger, *Technology and the Culture of Modernity in Britain and Germany, 1890-1945* (Cambridge: Cambridge University Press, 2005), 34.

mid-century airlines, TCA had to sell potential passengers on the *idea* of flying, not just on their particular services.[160] TCA's passenger comments through the late 1940s are littered with stories from "first flighters" and "land lovers"; one apologized because he was "not a good sailor" until a stewardess calmed him down, and another took "a long time to convince" his wife to fly.[161] Constructing transatlantic travel as a continuum of multiple time-space compressions offset some of these problems by tying airplanes to the great transports of history and providing them with the same heritage as other more familiar methods of transportation. This worked the opposite way as well in that that those great transports had the same time-space effect as an airliner, showing consumers that the overwhelming feelings associated with modern air travel were not, in fact, unique to modernity or air travel.

These themes were made obvious by the juxtaposition of easily-recognizable symbols of exploration, such as compass roses, sextants, and sailing ships, and ultra-modern aircraft in both images and copy. A widely-circulated



Figure 1: "Chart your course," featuring detailed topographical maps, 1956.

[160] Like the speed of railways and steamships through the nineteenth century, flight seemed to go against a sort of natural order. On rail see Schivelbusch, *The Railway Journey* and John Tomlinson, *The Culture of Speed: The Coming of Immediacy* (London: Sage, 2007), especially 14-17.

[161] "What Others Think of Us," *Between Ourselves*, April 1948, 7; "What Others Think of Us," *Between Ourselves*, October 1947, 23.

informational booklet from 1949 showed an image of colourfully dressed voyagers on an early-modern sailing ship pointing excitedly at an airplane in the distance, claiming "TCA flies the Atlantic on a schedule that would have filled the voyaging Norsemen with awe."[162] An air route map from the mid-1950s (Figure 1) featured an illustration of an airliner flying past a sextant, since "the land beyond the horizon has always held a fascination for adventurers armed with a parchment map, a dream of discovery—and often very little else...Today...air travel is a certain, scientifically controlled excursion, but should the pioneer spirit of adventure still spark within you, TCA invites you to chart your course...beyond the horizon."[163] This particular "Chart Your Course" slogan and "art treatment" were highlighted by advertising manager Jack McGee as likely to "arouse the interest of the reader."[164] Perhaps the most popular example of this was TCA's 1952 corporate Christmas card, which was "met with such favourable comment," according to the Advertising department, that it was re-printed as seat-back material the following year with a total circulation in the hundreds of thousands (Figure 2).[165] Designed as a stylized early modern "seafaring mappe," the card manipulated space and time by showing geographic features of the Atlantic and the paths of various voyages of exploration, from Eric the Red to the North Stars that "flieth" across the ocean. Time here appeared so compressed by advances in transportation that history happened all at once.

[162] Booklet, "Horizons Unlimited," 1949, Air Canada Collection 005.003, CASM.
[163] Brochure ADV. 41603-11-56-250M, "Chart Your Course," 1956, Air Canada Collection 005.003, CASM.
[164] Memorandum by J. A. McGee, "'Chart Your Course'—Route Map Booklet," 18 January 1957. Air Canada Collection 005.005 Box 06, CASM.
[165] Memorandum by J. A. McGee, "Advertising—Souvenir Flight Portfolio," June 26 1953, Air Canada Collection, CASM.



Figure 2: Detail from a seat-back portfolio based on TCA's 1952 corporate Christmas card.

These themes were also very present in TCA's advertisements for its Canadian destinations and in "system" advertisements designed to instill positive feelings about flying in general. Despite the different historical and contemporary challenges in crossing the Atlantic and crossing Canada, oceanic and Canadian flying were treated with the same discursive techniques in TCA's public-facing material. Vikings and their longboats served a similar purpose to wagons painstakingly crossing the prairie hundreds of years later: compressing time-scales and making air travel seem not only a natural part of this transportation history, but the *only* possible conclusion to a particularly Canadian teleology of movement across space. This was powerful rhetoric, using history to speak to the challenges of modernity. Even when the focus was general brand awareness and loyalty, TCA's aircraft were discursively and pictorially placed along a transportation progression from dogsleds and canoes to oxcarts, rail, and eventually airplanes.

"Does it seem like a miracle?" an early brochure asked. "To speed across Canada on the wings of the wind[?] It will, if you give a fleeting thought to the past" when settlers crawled

"across the prairies in ox-carts that squealed complaint with every turn of the wheel."[166] This progression had been long entrenched in Canadian technological mythmaking, especially in terms of the ill-defined "northland." "Until the advent of the aeroplane," Department of Defense civil aviation controller John Wilson wrote in 1929, "the old, historic means of travel—the canoe in summer and the dog team in winter—were the sole means of communication in two-thirds of the area of the dominion."[167] Calling canoes and dogsleds "old" and "historic," especially in comparison to modern flying machines, points to the significance of indigenous technologies to Canadian settler paradigms of mobility. Scholars interested in mobility, indigeneity, and Canadian identity formation have traced how settlers have appropriated indigenous transportations while at the same time denigrating them as "backwards." As Bruce Erickson has shown in his work on canoeing, the settler use of canoes for leisure created a performative "natural" Canadian-ness which decontextualized settler colonialism, Canadian history, and indigenous mobilities by suggesting that canoeing presented an "allure of openness" that placed "the birth of the nation in the landscape itself."[168] Daniel Francis has also argued that the twentieth-century surge in canoeing, kayaking, and other outdoor recreation was connected to nostalgia and "discontent with the fruits of progress."[169] Settlers saw these "native" activities as harkening to an earlier, purer form of interacting with the Canadian wilderness largely removed from their original purposes as practical methods of transportation.[170] For example, tobogganing

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[166] Brochure, "Flying Across Canada," c. 1939, Air Canada Collection 005.003, CASM.
[167] J. A. Wilson, "Civil Aviation in Canada," *Queen's Quarterly* 36 (1929): 296.
[168] Bruce Erickson, *Canoe Nation: Nature, Race, and the Making of a Canadian Icon* (Vancouver: UBC Press, 2013), 37.
[169] Francis, *National Dreams*, 147-148.
[170] Jessica Dunkin has recently examined the "irony" of travelling by train and steamer to a canoeing site. Jessica Dunkin, "Producing and Consuming Spaces of Sport and Leisure: The Encampments and Regattas of the American Canoe Association, 1880-1903" in *Moving Natures:*

and snowshoeing were "'improved' and made more modern and scientific by the application of rules and regulations" imposed by nineteenth-century settlers seeking new symbols of belonging, according to sport historian Gillian Poulter.[171] She argues that settlers believed themselves to be "elevating" indigenous technologies by transforming them into modern British sports, generating a homegrown visual symbology while discursively removing the indigenous influence.

Inside aviation discourse, indigenous technologies such as dogsleds, toboggans, and canoes came to stand in for old "backward" ways of travel, as Johnathan Vance has suggested in his work on early Canadian aviation culture.[172] Indigenous transports were essentially throw-away punch lines and easy foils to air travel's self-fashioning as fast, easy, accessible, and modern in journalistic and publicity accounts. Aviation, especially in the North, was a tool by which indigenous mobilities were replaced with settler ones, like the transition from canoeing-as-transport to canoeing-as-leisure, but with more drastic results. In a 1941 story on how Canada was "The Most Air-Minded Nation on Earth" in *Rotarian* magazine, the pilot of the first controlled powered flight on Canadian soil John McCurdy argued that "even Eskimos of the North who have never seen an automobile became [in the interwar period] blasé to flashing wings overhead."[173] Indigenous peoples of the North, it seemed, were being fast-tracked to

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Mobility and the Environment in Canadian History, eds. Ben Bradley et. al., (Calgary: University of Calgary Press, 2016), 229-250.

[171] Gillian Poulter, *Becoming Native in a Foreign Land: Sport, Visual Culture, and Identity in Montreal, 1840-85* (Vancouver, UBC Press, 2009), 204. See also "Embodying the Nation: Indigenous Sports in Montreal, 1860-1885" in *Contesting Bodies and Nation in Canadian History*, eds. Patrizia Gentile and Jane Nicholas (Toronto: University of Toronto Press, 2013), 69-96.

[172] Jonathan Vance, *High Fight: Aviation and the Canadian Imagination* (Toronto: Penguin Canada, 2002), 154. Liza Piper too identifies dogsleds and airplanes as a "common juxtaposition" of "'modern'" and "'premodern.'" Piper, *The Industrial Transformation of Subarctic Canada*, 75.

[173] John McCurdy, "The Most Air-Minded Nation on Earth," *The Rotarian*, December 1941, 26.

technological modernity, and statements such as these suggested that airplanes (rather than automobiles or rail) was the best modern transportation system for Canada.

Placing older technologies, especially indigenous ones such as dogsleds and toboggans, next to its aircraft served several discursive functions at TCA. First, as the journalists and passengers imagined it, comparing airliners to other geographically-appropriate transportations made them seem even more modern, quick, and reliable. This was a common technique in mid-century aviation advertising in general, as airplanes were frequently pictured next to slow horse-drawn carts, broken down jalopies, and even occasionally trains.[174] In Canada, though, this technique also drew on a century of envirotechnical imaginaries, framing the nation's history in terms of mobility across space with the same compressive flavor as the transatlantic promotions from the same period:

> "A little more than a century ago, Sir George Simpson, Governor of the Hudson's Bay Company...left Montreal on a record-breaking 3,000-mile journey to Vancouver. Twelve weeks later, after an arduous trip by canoe, ox-cart and on horseback, he arrived at the Pacific coast, a little worse for wear, but triumphant. In Simpson's time that was no small achievement. Neither was the much later feat of organized ground transport in reducing the transcontinental crossing to four days. Yet now [TCA] bridges that great distance in just fourteen hours and sets standards of its own. The contrast is a measure of the swift transport progress of our times."[175]

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[174] For some air travel histories that deal with advertising, see Daniel Rust, *Flying Across America: The Airline Passenger Experience* (Norman: University of Oklahoma Press, 2009), A. Bowdoin Van Riper, *Imagining Flight: Aviation and Popular Culture* (College Station: Texas A&M University Press, 2004), especially 83-108, and Guillaume de Syon, "Lufthansa Welcomes You: Air Travel and Tourism in the Adenauer Era" in *Selling Modernity: Advertising in Twentieth-Century Germany* eds. Pamela Swett et. al (Durham: Duke University Press, 2007), 182-201.

[175] Booklet, "Horizons Unlimited," 1949, Air Canada Collection 005.003, CASM.

Mobility from coast-to-coast was central to the Canadian geographic nation, but Canadians flew infrequently from Halifax to Victoria.[176] Canadian aerial transcontinentality therefore served a symbolic purpose, acting as an heir to rail-based paradigms of transcontinental travel and allowing TCA to build a history for aviation in general, and itself as a state airline in particular, that fed directly off the problems of existing at the border of geographic possibility. Canada seemed like natural fit for aviation, and airplanes a natural fit for Canadian environments, which implied that rail was simply a stepping-stone to the *real* coast-to-coast communications: aviation. As a 1930s TCA brochure claimed, "the railways made the Canada of the Nineteenth Century and led the way into the Twentieth. Without them, the Dominion couldn't have been, but they were not enough. They still had their part to play, and always will have, but...Canada, too, must have wings."[177]

Canada's geographic particularities, such as its variability and largely inaccessible "north" inspired what McGregor called a "lusty development of civil aviation" in the form of "bush flying."[178] Bush flying, the public and private enterprises that engaged in surveying, mapping, fire-fighting, and the transportation of people, goods, and mail to parts of Canada loosely inhabited by settlers, emerged as what historian Don Thompson has called "a peculiar Canadian phenomenon" in the interwar period.[179] Bush pilots—largely former military pilots—and bush planes—which were increasingly purpose-built through the 1930s—came to represent

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[176] Rob MacDougall has similarly argued that for early long-distance telephony in Canada, transcontinentality was more symbolic than practical, since Canadians were generally not terribly interested in calling the opposite coast and sound quality across that far a distance was poor. MacDougall, "The All-Red Line," 53-55.
[177] Brochure, "Flying Across Canada," c. 1939, Air Canada Collection 005.003, CASM.
[178] Address by Gordon R. McGregor to the Royal Canadian Flying Clubs Association, 25 January 1949, Gordon R. McGregor fonds, MG30 E283, volume 13, LAC.
[179] Don W. Thomson, *Skyview Canada: A story of Aerial Photography in Canada* (Ottawa: Energy, Mines, and Resources Canada, 1975), 29.

"the romance of transportation," as an Edmonton newspaper claimed in 1929, and were cast as homegrown heroes.[180] The adventures of pilots such as former WWI ace Wilfrid "Wop" May and Roméo Vachon, known as the "Flying Postman of the North Shore," captured the imagination of everyday Canadians seeking the next generation of heroes. This was a particularly evocative history for TCA to work with, as bush flying was mobilized as a symbol of both Canadian technological ability more generally and the specific uses of aviation to tame Canadian geography through the twentieth century. Marionne Cronin has argued that the development of Canadian purpose-built bush planes and surveying techniques "provides a window into the influence of persistent national conditions, particularly geography, on the development of a national style of technology."[181] They were also part of a set of "new tools—technological and conceptual—that industrial interests," including the state, used to re-imagine the North "from new perspectives," as Liza Piper has argued in her work on subarctic Canada's large lakes.[182] Although there has been little scholarly attention paid to bush flying's status as a Canadian cultural icon, Cronin and Piper's suggestion that purpose-built bush planes might lend themselves to a national style and be part of sociotechnical imaginaries about how to best govern the nation hints at the discursive uses of this technology.

TCA relied on bush flying's pre-existing currency in Canadian history to make aviation seem like the expected conclusion to national progress, especially as the "North" became increasingly valuable to national mythmaking through the middle part of the twentieth century.

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[180] "Air Service From Waterways Links Simpson to Steel," *Edmonton Journal*, January 8, 1929.
[181] Marionne Cronin, "Northern Visions: Aerial Surveying and the Canadian Mining Industry, 1919-1928," *Technology and Culture* 48:2 (2007): 306. See also Cronin, "Shaped by the Land: An Envirotechnical History of a Canadian Bush Plane," in *Ice Blink: Navigating Northern Environmental History*, edited by Stephen Bocking and Brad Martin (Calgary: University of Calgary Press, 2017), 103-130.
[182] Piper, *The Industrial Transformation of Subarctic Canada*, 34.

One 1946 institutional history suggested that Canadians were active in aviation "when the Wright brothers were unfledged youngsters." Canadian pilots returning from the war took to "northland flying," as it was frequently called, and "began pioneering in forestry surveys and fire protection from the sky, in aerial photography and mapping." Eventually, "Canadians began to realize the value of wings in reaching the outposts of their vast northern wilderness." Mobilizing bush flying also helped TCA self-legitimize as a tool of the state. It made sense, according to public-facing materials, that the state should control, even at arm's length, the trajectory of aviation in Canada because "it was bush flying that put Canada into the front rank of world aviation...T. C. A. grew out of the need for a swift, modern system of transportation between communities scattered across an area of more than 3,000 miles, out of a vision of a more closely integrated nation."[183] And there was a direct lineage from Canada's adventurous bush flying heroes to regular reliable airline travel, since TCA was founded to operate on the Trans-Canada Airway, in turn constructed to consolidate and coordinate the jumble of interwar bush flying routes through the 1930s. TCA's advertising personnel made frequent use of this pedigree by highlighting the "northland flying" experience of their personnel and reminding passengers of how useful aviation had been to Canadian nation-building.[184]

TCA's early public-facing materials featured several sorts of time-manipulations. Larger scale Atlantic history stretching back millennia placed TCA's newest routes into historical perspective. Materials that juxtaposed caravels with sleek airliners made air travel less intimidating because it gave the machines and routes a teleology that invoked both adventure and routine. They also echoed the "speed-up," as David Harvey has called it, of modernity by making

[183] Robert H. Ayre, "TCA Wins Place Among World Air Lines," *Canadian Geographical Journal*, July 1946, Air Canada Collection 005.003, CASM.
[184] Advertisement, "The Men 'Up Front,'" 1949, Air Canada Collection, CASM.

transportation development appear to accelerate.[185] Similar techniques in TCA's system advertisements worked on a slightly smaller scale—the length of time settlers had been in Canadian territory—to make airplanes and a state airline a natural, necessary part of national progress that could help modernize the nation. Geography, the subject of the next section, is what made those histories especially evocative in the mid-century Canadian context.

Shrinking Canada and the Uses of Geography

TCA's promotional materials leaned heavily on constructions of Canada as a nation with distances only human ingenuity could overcome. These constructions were artifacts of nineteenth- and early-twentieth-century rail and other communications paradigms, but with an added level of high-modern techno-scientific rhetoric that suggested that rail was simply not enough for the realities of twentieth century life. A state-run commercial airline appeared to be natural and necessary, since, as one wartime public relations packet claimed "it had become evident that something more was needed; that a nation so vast in its distances and so various in its economic divisions could not afford to do without the fullest time and distance-destroying advantages of aviation. So Trans-Canada Air Lines was designed to meet a great Canadian need." TCA's public-facing institutional histories frequently claimed that commercial aviation in the guise of a state airline was vital to Canadian success on a national and international scale, especially in wartime. That same public relations packet pointed out that "it was a fortunate circumstance for Canada that the very moment her geographic immensity most threatened her efficiency the distance-destroying power of transport aviation should have come newly to hand."

[185] Harvey, *The Condition of Postmodernity*, 265-266. For more on the connections between the modern acceleration of time and increasing transportation speeds, see Chandra Bhimull, "Empire in the Air: Speed, Perception, and Airline Travel in the Atlantic World" (PhD Diss., University of Michigan, 2007), 41-51.

[186] Canadian geography was a double-edged sword, threatening national security and unity while at the same time supporting discursive constructions of nation; "Canada has often been referred to as a land of magnificent distances," a 1947 air route map claimed. "That was before the coming of Trans-Canada Air Lines. [Now] east and west coasts are less than 24 hours apart."[187] If Canada was only a land of "magnificent distances" *before* air travel, how could those distances remain foundational to Canadian national identity?

TCA partially avoided this question by making those distances necessary to the establishment of Canadian aviation, which included geography in foundational myths while still removing it in the present. TCA's public-facing material suggested that Canada, which McGregor called "by census…a small country, and by Atlas a very big one," was environmentally primed for a successful space-shrinking commercial aviation industry.[188] Geography might have been no match for Canadian techno-scientific expertise, but the fact that it was a barrier for Canadians to overcome with ingenuity is what gave it its value; a mid-1950s pamphlet pointed out how it was "understandable in a country of great distances" that "Canadians are among the world's most airminded travellers" and were "among the first to put the airplane to practical use." [189]

Air travel's time-space compression could be a detriment to Canadian environmental identity because it made character-building geographic features, such as what McGregor called

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[186] Draft, "Trans-Canada Air Lines: Questions and Answers," 29 November 1945, Air Canada fonds, RG70 volume 5, LAC.
[187] Brochure, "Air Lines Map of Trans-Canada Air Lines and Connections in Canada & United States," 1947, Air Canada Collection 005.003, CASM.
[188] Address by Gordon McGregor to the Royal Canadian Flying Club, 25 January 1949, Gordon R. McGregor fonds, MG-30-E283, volume 94, LAC.
[189] Brochure, "Winged Facts about TCA," c. 1955, Air Canada Collection 005.003, CASM.

the "great natural barriers" of the Rockies and "Precambrian Shield," disappear.[190] It could also be a benefit because it extended travelers' geographic reach towards those features, increasing accessibility to a diversity of Canadian vacation experiences. Shrinking the nation by air allowed access to "all Canada's famed vacation lands...the Rockies—the Prairies—the holiday resorts of Ontario, Quebec, and the Maritimes," as one 1947 advertisement suggested, because "T.C.A. takes you there in hours instead of days."[191] It also democratized access to, with apologies to David Nye, a sort of "Canadian technological sublime": envirotechnical experiences "organized for crowds of tourists" and underscored with enthusiasm for technology and its intrusions on the natural world.[192] I would suggest that the Canadian sublime retained more of its focus on the natural world than the American, but still embraced "the reconstruction of the life-world by machinery" and reimagined the "dislocations and perceptual disorientations caused by this reconstruction in terms of awe and wonder." That is, the Canadian culture of bigness was supported and dismantled in the same breath, turning the disorienting effect of time-space compression and seemingly unnatural altitude into an awe-inspiring Canadian experience of nature. The Rockies in particular, as an especially beautiful and treacherous mountain range, were no longer an obstacle to mobility; as "new technologies become self-justifying parts of a national destiny," more Canadians could visit them and appreciate what it meant to nationhood to overcome those same character-building obstacles.[193]

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[190] Address by Gordon R. McGregor, 1 June 1948, Gordon R. McGregor fonds, MG30 E283, volume 13, LAC.
[191] Advertisement, "T.C.A. Makes ALL CANADA Your Vacation Land," 1946, Air Canada fonds RG70, volume 11, LAC.
[192] David Nye, *American Technological Sublime* (Cambridge: MIT Press, 1994), 43.
[193] Nye, *American Technological Sublime*, 282.



Figure 3: "Canada is only one day wide," 1941 or 1942.

The other way TCA supported and dismantled Canadian bigness in equal measure was by discursively substituting time for space. Canada's "magnificent distances" were subtly transformed into magnificently long travel times; time-space compression and time-space conflation went hand-in-hand. This allowed Canada's size to remain the same, but highlighted TCA's role in making that size less overwhelming to the popular imagination as well as addressing more tangible concerns such as the movement of goods and information. Thanks to TCA, the Canadian businessman "can now fashion his activities and ambitions...secure in the knowledge that Canada is only twenty hours wide and that time of travel has ceased to be a major obstacle."[194] In so doing, TCA explicitly used the rhetoric of space and time, arguing frequently, as one of the airline's first newspaper advertisements claimed, that "a people of vision and enterprise could not be held back by the barriers of time

[194] Draft, "Trans-Canada Air Lines: Questions and Answers," 29 November 1945, Air Canada fonds RG70, volume 5, LAC.

and space. Trans-Canada Air Lines came into being, and now the Dominion is no wider than a single day!"[195]

This is especially evident when TCA's promotional material addressed airmail and freight. Airmail in particular had the added benefit of substituting time for distance on a number of scales, connected as it was to two communications infrastructures, and promotions for the service used language that would not have been out of place in an advertisement for telegraphy. Early brochures explaining how air mail worked framed it as receiving "tomorrow's mail today," because of "you are in fact mere hours rather than days away from your loved ones."[196] Air freight and airmail were more tangible clues that "Canada's vast distances are diminishing rapidly as modern airplanes...bring the far-flung communities within a few hours of each other."[197] It was also a visual metaphor; the 1948 TCA promotional film "A New Map for Canada" opens with a boy drawing a map of Canada as a homework assignment, "but it proves a task too large and too overwhelming." He asks a family friend, a TCA Captain, for help and is taken on an imaginary coast-to-coast air journey along TCA's routes to learn "that the Dominion is not the wide expanse of past generations but the 'one-day-wide' Canada of today."[198] A 1949 newspaper advertising campaign literally juxtaposed time and space by replacing the hands of clocks and watches with a North Star flying over maps of Europe.[199] The airmail brochure discussed above featured a sample letter sent from Montreal to "Everywhere, Canada"; the idea that letters could be sent virtually instantaneously to all places suggested that time and space

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[195] Advertisement, "TCA Speeds the Nation's Business," c. 1942, Air Canada Collection 005.003, CASM.
[196] Brochure, "Give Wings to your Letters," c. 1940, Air Canada Collection 005.003, CASM.
[197] Brochure, "Flying Across Canada, c. 1939, Air Canada Collection 005.003, CASM.
[198] "A New Map for Canada" script, c. 1948, Air Canada Collection 003.005 Box 1, CASM.
[199] Advertisements M-49-23-A and M-49-24-A, 1949, Air Canada Collection 005.001.003, CASM.

were rendered meaningless by the transformative power of the airplane. These sorts of images often appeared alongside violent language when discussing TCA's role in transforming space into time; North Stars "will scatter our old concepts of distance...by slashing" travel times, and "so effective has been the attack of TCA upon Canadian distances that already they have lost much of their old significance."[200] It was with great force, apparently, that TCA and its machines eliminated distances in Canada, but it still maintained the value of those distances by making time and space interchangeable and turning distance into a foundational myth.[201]

In its replacing distance with time—"Canada is now one day wide"—TCA was pointing out that it had caused Canada to "effectively shr[i]nk in size," as James Vernon has argued for roads and rail in Britain, while still predicating the resulting "closely knit national space" on the idea of bigness.[202] Not only was the substitution of distance with time a symptom of modern time-space compression, but it was also a symptom of the modern obsession with speed. Speed was TCA's most obvious benefit over rail, but speed could be scary. Even as late as 1961, the advertising department labelled "FARE and FEAR" as "the main barriers against flying."[203] Evoking speed in promotional material meant dealing with passengers' greatest anxieties about the air travel experience, as Rick Popp has recently shown for the United States. Just as railway accidents in the nineteenth century exposed the hubris of speed, "puncturing the veil of the ordinary that such technologies needed to pass as natural fixtures of the modernizing landscape,"

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[200] "North Stars Across the Continent," *Between Ourselves*, December 1947, 16-17. "Doing a Job for Canada," *Between Ourselves*, March 1947, 12.
[201] For more on using time to measure distance and geographic difference, see Chapter 4.
[202] Vernon, *Distant Strangers*, 30.
[203] Memorandum by J. A. McGee, "North American Services—Canada," 12 April 1961, Air Canada Collection, CASM.

so too did airlines struggle with routinization.[204] Popp suggests that mid-century air travel was one of the only instances where advertisers' goals were "to allay fears, rather than amplify them," and they developed a core set of themes and techniques to accomplish this goal such as reducing advertising after a crash received a great deal of media attention.[205] TCA faced similar obstacles, perhaps amplified by its public ownership; McGregor complained in 1950 of the "blinding light of publicity which is turned upon all [TCA's] activities...with the astonishing result that even a blown tire at an airport 10,000 miles away is faithfully reported by press."[206]

Flying's disorienting altitude, which appeared to go against the laws of nature, and frightening speed were tricky themes for advertisers to address. One of the airline's strategies, relatively unique to TCA, was to imagine transportation in Canada as a competition between air and rail. Although TCA was generally reticent to draw direct comparisons between flying and traveling by train, largely because of TCAs relationship to the CNR, references to train travel did appear. They were sometimes hidden—one late 1940s "sun destination" campaign only referenced rail in the French-language version of the ad—and sometimes used obliquely to make a larger statement about time, space and speed. A 1949 brochure compared the costs of a TCA ticket from Montreal to Vancouver with first-class rail along the same route; although airfare "would cost you only a little more than your rail fare," the real savings were in "work done or

[204] Richard Popp, "Commercial pacification: Airline advertising, fear of flight, and the shaping of popular emotion," *Journal of Consumer Culture* 16:1 (2016): 65. See also David Courtwright, "The Routine Stuff: How Flying Became a Form of Mass Transportation," in *Reconsidering a Century of Flight*, eds. Roger Launius and Janet R. Daly Bednarek (Chapel Hill: University of North Carolina Press, 2003), 209-222.
[205] Popp, "Commercial Pacification," 62.
[206] Address by Gordon McGregor to the Canadian Railway Club, 13 February 1950, Gordon R. McGregor fonds, MG-30-E283, volume 13, LAC.

leisure gained" in the time saved by flying.[207] TCA also issued a "passenger's handbook" called "Facts About Flying" for first-time or nervous fliers, which told passengers to:

> "Relax. Make yourself comfortable. Don't give it a thought...Incidentally, there is little to no 'height sensation' in an aircraft. This is purely visual and, with no line-of-reference to the ground...is all but eliminated. Similarly, there is little 'speed sensation' in flight because of the absence of such reference points as the trees and telephone poles that whizz past the window of the surface traveller."[208]

The whizzing trees and telephone poles are a clear reference to rail, which faced its share of speed-related anxieties in the nineteenth century, as Wolfgang Schivelbush and others have shown.[209] Speed, as modernism scholar Jeffrey Schnapp reminds us, is the "distinctive drug of modernity," and TCA's public-facing materials from around its decennial year were a clear attempt to make air travel appear *faster* than rail, but somehow less *speedy*, given the absence of visual cues that created the perception of speed.[210] Even in one of TCA's first publicity brochures, passengers were reassured that "you have scarcely any sense of motion, certainly no sense of the speed which so astonishingly shortens your journeys."[211] *Motion* and *speed* were discursively separated, allowing flying to be constructed as part of the modern experience because of its "fastness," but also removed from it because of the safety, mundanity, and regularity that made "speed" less of an issue.

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[207] Booklet, "Horizons Unlimited," 1949, Air Canada Collection 005.003, CASM.
[208] Brochure, "Facts about Flying," c. 1949, Air Canada Collection 005.003, CASM.
[209] Schivelbusch, *The Railway Journey*. See also Ana Parejo Vadillo and John Plunkett, "The Railway Passenger; or, The Training of the Eye," in *The Railway and Modernity: Time Space, and the machine Ensemble*, edited by Matthew Beaumont and Michael Freeman (Oxford: Peter Lang, 2007), 45-68.
[210] Jeffrey T. Schnapp, "Crash (Speed as Engine of Individuation), *Modernism/Modernity* 6:1 (1999): 21.
[211] Brochure, "Flying Across Canada, c. 1939, Air Canada Collection 005.003, CASM.

Canada From Above and TCA's Aerial Views

If speed was the drug of the long nineteenth century, altitude was the drug of the twentieth. Aerial views, especially views of cities, and the production of vertical spaces in general are hallmarks of the modern experience, as Nathalie Roseau, Thomas Campanella, and art historians and geographers Denis Cosgrove and William Fox have suggested.[212] Furthermore, the vertical and the view from above shaped perceptions of modern warfare, and, in turn, the airplane, thanks to the preponderance of aerial reconnaissance and aerial bombing.[213] In his landmark book on high modernism, James Scott has argued that "it would be hard to exaggerate the importance of the airplane for modernist thought and planning"; verticality and the "God's-eye view" transformed city planning and megaprojects such as the Great Lakes-St. Lawrence Seaway.[214] Although Scott and other scholars of modernism point out that the "God's-eye-view" eliminated local and regional texture, Jason Weems has recently argued that aerial views actually *created* a regional identity for the American Midwest, where "the prairie landscape, with its vast and undifferentiated topography and its rigidly imposed cadastral grid, resisted conventions of horizontal vision...aerial views made it possible to see the region as a unified whole and to

[212] Nathalie Roseau, "The City Seen from the Aeroplane: Distorted Reflections and Urban Futures," in *Seeing from Above: The Aerial View in Visual Culture* eds. Mark Dorrian and Frédéric Pousin (London: I.B. Tauris, 2013), 210-227, Thomas Campanella, *Cities from the Sky: An Aerial Portrait of America* (Princeton: Princeton Architectural Press, 2001), Denis Cosgrove and William L. Fox, *Photography and Flight* (London, Reaktion Books, 2010).
[213] Thomas Hippler, *Governing From the Skies: A Global History of Aerial Bombing* (London: Verso, 2017); Robert Wohl, *The Spectacle of Flight: Aviation and the Western Imagination, 1920-1950* (New Haven: Yale University Press, 2005).
[214] Scott, 57-58. For an in-depth case study aerial views in Parisian city planning, see Haffner, *The View From Above.* John van der Veen's "Megaproject's New Media Series," companion to Joy Parr, *Sensing Changes*, relies heavily on historical and contemporary aerial photographs. <megaprojects.uwo.ca>

understand the relationships that shaped regional life."[215] The view from above has been a conduit for the creation, maintenance, and disruption of modern communities of belonging and difference on a variety of scales.[216]

Passenger aviation has received relatively little attention from scholars interested in these themes, despite it being one of the few channels through which everyday consumers could experience these unique views. Other sorts of "democratic" modern technological views have been analyzed as symptomatic of modernity and high-modernity: Krista Thompson and Bernhard Rieger have both examined cameras and photography as conduits for modern communities of belonging, and David Louter and Ben Bradley have used car windshields as focal points for their studies of North American parks.[217] Commercial air travel touches on many of these gazes, as passengers frequently looked through windshields and cameras, sometimes at the same time. Aerial photography had been possible since the mid-nineteenth century, but it was only after controlled powered flight that it could be used reliably for more than novelty purposes.[218] The democratization of both airplanes *and* cameras—two "modern wonders"—opened up the experience of aerial photography to the masses. TCA estimated in the early 1950s that up to 75% of passengers carried cameras and provided travel agents with information on how "to get the

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[215] Jason Weems, *Barnstorming the Prairies: How Aerial Vision Shaped the Midwest* (Minneapolis: University of Minnesota Press, 2015), xi.
[216] See also, for example, Nye's discussion of the "feelings induced by seeing a panorama of man-made objects" from skyscrapers and bridges in *American Technological Sublime*, 77-108.
[217] These gazes as they relate to one particular set of destinations (the "tropics") will be explored further in Chapter 4. Krista Thompson, *An Eye for the Tropics: Tourism, Photography, and Framing the Caribbean Picturesque* (Durham: Duke University Press, 2006); Rieger, *Technology and the Culture of Modernity*; David Louter, *Windshield Wilderness: Cars, Roads, and Nature in Washington's National Parks* (Seattle: University of Washington Press, 2006); Bradley, *British Columbia by the Road*.
[218] For an overview of pre-controlled-powered-flight aerial views and aerial photography, see Gregory Votolato, *Transport Design: A Travel History* (London: Reaktion, 2007) 155-163.

best results from in-flight photography ...through Skyliner windows," including how to hold the camera to avoid vibration—"well braced against the body"—and glare.[219] Furthermore, *any* gaze from an airplane was a modern technological gaze; TCA's airliners acted as mediators between Canadians and their surroundings, providing them with a concrete experience of time-space compression.

Aerial photography as a technological gaze grew up in Canada with the bush flying industry.[220] Viewing Canada from above was necessary to make Canada legible, and making Canada legible was necessary to making Canadian governance possible.[221] In the Arctic especially, photography had long been a way for Canada to claim sovereignty. One series of voyages through the late 1900s and early 1910s laid claim to the land by erecting a cairn containing a metal box with a "proclamation of Canadian occupation" and a British flag, and then photographing it, providing "visual proof of Canadian actions and intent."[222] In 1925, Ottawa mobilized an arm of the RCAF to conduct aerial surveys of the North, mostly for the Department of Mines and Resources, and established the National Air Photo Library as a

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[219] Memorandum by R. E. Deyman, "SALES PROMOTION—60-Day Summer Excursion Fares," 22 March 1951, Air Canada Collection, CASM.

[220] Marionne Cronin has isolated bush planes and the grid-mapping techniques developed by bush operators as technologies that have been both geographically and socially constructed. Marionne Cronin, "Flying the Northern Frontier: The Mackenzie River District and the Emergence of the Canadian Bush Plane, 1929-1937" (PhD diss., University of Toronto, 2006), 17-22.

[221] James Vernon uses the example of weapons to show how as "increasingly effective systems of transportation allowed the state to reach further and faster afield than before...new technologies allowed it to wield its violent force at an increasing distance." Photography was one of the many "weapons" used by the Canadian state in their campaigns of settler-colonialism-from-a-distance against the Indigenous peoples of Canada's North. Vernon, *Distant Strangers*, 67.

[222] Peter Geller, *Northern Exposures: Photographing and Filming the Canadian North, 1920-45* (Vancouver: UBC Press, 2004), 20.

repository of photographs of the dominion.[223] This had a practical purpose, as a survey that took seven months by canoe, on foot, and by snowshoe in 1900 took just two days by air in 1930, but it also shaped how Canadian landscapes were captured in the national imagination. These photographs emphasized vast expanses of wilderness over evidence of human activity, which meant that from a distance, Canada appeared "open and undeveloped." Aerial photography "normalized" the view from above as a dominant form of understanding Canadian landscapes intimately connected to both pragmatic state control and longstanding myths about the apparently infinite nature of Canada's landmass.[224]

The long history of photographing Canada from above as a state project made the aerial views of Canada provided by TCA easy to portray as a comfort and a corrective to air-travel-related ills instead of a cause of them. "There's no boredom in air travel," a 1947 brochure claimed. "The miles pass too quickly for that. Forest and farm land, wide prairies, rolling foothills and the majesty of the Canadian Rockies...the landscape is always changing."[225] Canada's geographic variability worked to break up the perceived monotony of air travel while representing Canadian techno-scientific ingenuity and evoking the conditions that made air travel part of the Canadian environmental imagination. Passengers were told that "from your skyliner window the world below is a fascinating display of our resources and the way we use them," and the airplane itself was "an illustration of science at work on these same resources to overcome

[223] Piper, *The Industrial Transformation of Subarctic Canada*, 36. For an overview of the modified-oblique photography technique used by the Canadian mining industry in the interwar years, see Cronin, "Northern Visions," 316-322.
[224] Piper, *The Industrial Transformation of Subarctic Canada*, 36-37.
[225] Leaflet, "In a Hurry? Fly TCA!" 1947, Air Canada Collection 005.003, CASM.

time and space. We hope you feel by now that 'flight-seeing' adds measurably to the pleasure of your trip."[226]

More importantly, TCA's supply of altitude made looking at Canada from above an authentic Canadian envirotechnical experience that only it could provide. Aerial photography and illustration featured heavily in TCA's public-facing material, appearing everywhere from airmail envelopes to the "not in any way promotional...[and] purely functional" passenger comment cards.[227] Postcards showing aerial views of TCA's destinations, and often meta-views of the aircraft flying above a destination, were provided in seat-back portfolios through the late 1940s and early 1950s. Visitors to the TCA booth at the 1949 Canadian National Exhibition were greeted by "eight large window frames through each of which...[was] shown as series of 30 coloured slides" of aerial views of TCA's destinations, which the advertising department considered "one of the most extensive showings of photographs of this type ever brought together."[228] This was not an uncommon strategy at other airlines, as aerial photography was still relatively novel, but at TCA aerial views echoed the "romance" of bush-flying-era aerial surveying and photography, made air travel an organic part of the Canadian transportation pantheon, and gave passengers something they could not get with train travel.

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[226] Booklet, "Horizons," 1949, Air Canada Collection, CASM.
[227] Memorandum by D. C. Bythell, "'Comments and Suggestions' Folder," 29 November 1949, Air Canada Collection 005.005 Box 1, CASM.
[228] Memorandum from D. C. Bythell, "T.C.A. Exhibit Canadian National Exhibition," 24 August 1949, Air Canada Collection 005.005 Box 1, CASM. The slides were replaced with stationary picture panels at the 1950 exhibition.

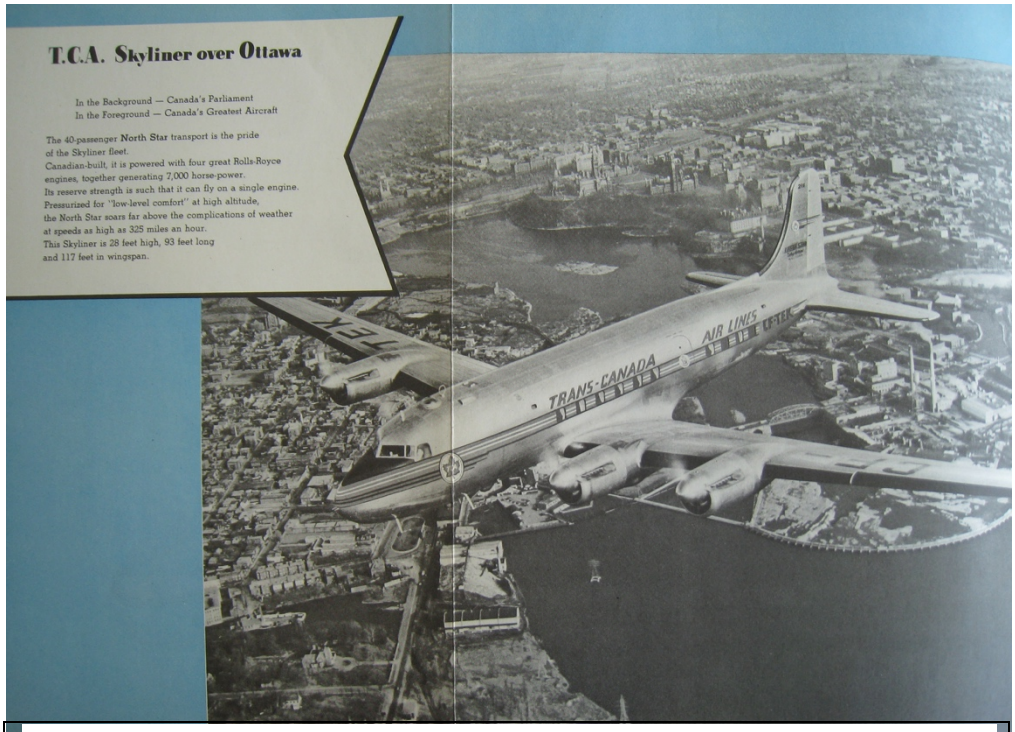

Figure 4: "Skyliner Over Ottawa" from a 1949 publicity brochure.

The emphasis on the aerial view seemed to work. Passengers came to expect a view and complained when they did not get what was promised, as one passenger did in 1948: "our only disappointment was the weather. We couldn't see New Brunswick from the air."[229] The "dirty state of windows" upset "camera fiends" on a different 1948 flight.[230] A Lethbridge "land lover" on a flight to Winnipeg was left uneasy because "it was necessary for the plane to fly above the clouds and the earth was not visible" and a couple's trip from Saskatoon "was largely reduced from a holiday trip to mere transportation" when "a line of men pushed in and took all the window seats."[231] Passengers asked for more windows, larger windows, tinted windows, for the glass to be removed from the windows to "see that much more," and that the "wings be painted a

[229] "From a Sussex, N.B., Passenger," *Between Ourselves*, January 1948, 3.
[230] "From an East Kelowna Passenger," *Between Ourselves*, February 1948, 3.
[231] "From a Lethbridge Passenger," *Between Ourselves*, February 1948, 3. "Broken Up Two-Some," *Between Ourselves*, February 1951.

drab black" to reduce glare.[232] One even asked, tongue-in-cheek, for "deck chairs on the wings. Of course, tied down."[233] Historians of advertising have pointed out the problems with isolating the efficacy and success of individual advertisements and campaigns, but the volume of passenger requests for more or better views shows that TCA's public relations priorities resonated with at least some of its passengers.[234]

Some of them may have resonated too much, as passengers sometimes wondered why their views didn't look like what they expected from high-modern aerial photographs or maps. One 1953 passenger was surprised that "that the Stewardess could not tell me anything about the geographic nature of the country over which we flew," and suggested educating the cabin crew in geography and cartography.[235] Usually, though, passengers wanted detailed topographic maps, which TCA eventually released in the mid-1950s, announcements of landmarks by the pilot, or that "the names of larger places over which the plane passes [be] given by flashing on a screen or similar device."[236] They also occasionally asked for access to the same altitude, airspeed, and positional information the pilots had, generally in the form of "flight instruments" displayed in the cabin, which would help passengers identify their views while at the same time giving them a

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[232] "Seeing is Believing," *Between Ourselves*, August 1951, 3; "Crow's Wing," *Between Ourselves,* January 1953, 3.
[233] "Department of Optimism," *Between Ourselves*, October 1950, 3.
[234] Liz McFall's "persuasiveness thesis" is more-or-less the dominant model for measuring historical advertising effectiveness. She argues that advertising has become more persuasive over time through rhetorical strategies, technological change, and media saturation (for example), but even "persuasiveness" is hard to define. This becomes even more difficult when judging the effectiveness of a *particular* advertisement rather than advertising *in general*. Liz McFall, *Advertising: A Cultural Economy* (London: Sage, 2004), 35-60; Lears, *Fables of Abundance*, 3; Marchand, *Advertising the American Dream*, xvii.
[235] "Where are We?" *Between Ourselves*, December 1953, 10.
[236] The "moving map" currently used by Air Canada is the heir to this request. "Again—Where are We?" *Between Ourselves*, May 1951, 3.

glimpse into the inner workings of the aircraft.[237] Passengers seemed to want the same kind of legibility that the state got from aerial surveys, and their requests for flight aids also suggested that demystifying their views might also help demystify the aircraft itself.

In general, passengers were receptive to TCA's aerial visual priorities, and they found viewing Canada from above as transcendent as the airline hoped they would. The fact that they wished for a "plane made of transparent material" as well as "a map handy with plenty of topographic information" shows that they wanted their air travel experience to be as visually rich as possible.[238] And, as a handful of passengers said, it was that they were flying over *Canada* that made air travel worthwhile. An American passenger flying to Canada for the first time thought that "God planted the most beautiful landscape directly beneath TCA's routes."[239] A 1950 passenger praised the "perfect visibility" on their flight from Calgary to Vancouver that allowed them to enjoy the "clear skies above and snow and glacier covered mountains below."[240] Still another, from summer 1948, "wondered if your publicity department has played up" how beautiful flying was compared to ground transportation—"not even a Winston Churchill could properly describe the allure of it all."[241] Clearly the publicity department had played it up, as Canada's overwhelming size, and the already-established role of bush flying in reducing that size, made the manipulation of geography by airplane especially evocative. It also involved an appeal to technological history, discursively opening the airplane's intimidating black boxes and making it seem as organically connected to the Canadian landscape as rail appeared to be. Rail

[237] "Where are We?" *Between Ourselves*, May 1951, 3.
[238] "So the Birds Could Look In?" *Between Ourselves*, December 1950. "Where am I?" *Between Ourselves*, Midsummer 1952, 3.
[239] "From a Westchester, Ill., Passenger," *Between Ourselves*, April 1948, 7.
[240] "From a San Pedro Passenger," *Between Ourselves*, January 1950, 13.
[241] "From a London, England, Passenger," *Between Ourselves*, September 1948, 6.

may have been seen as responsible for coast-to-coast connections and the confederation of the Canadian state, but flying made those connections visible and legible to everyday Canadians. One 1950 passenger brought these themes together by claiming that only a "poet-scientist" could properly describe the power of flying over Canada in a TCA aircraft:

> "Riding a TCA North Star is the closest you can get to Heaven—It's an experience that no human being should miss. Besides, it gives one a new and unusual sense of the one-ness of Canada. As you watch the provinces slip beneath your eyes in all their colorful beauty—the breath-taking magnificence of the Rockies, rich-chequered Prairies, small lonely farms, brilliant welcoming cities—you discover with a freshness and impact never achieved by history books or geographies that this is one country, our own."[242]

This was not entirely unique to Canada. A *National Geographic* feature from the 1930s described flying across the United States as a way to get "a more realistic picture of the geography of the country...for aloft one sees as one piece man-made works too large to comprehend from the ground."[243] However, statements like these had special currency in Canada. Bush flying in the form of aerial photography, surveying, and mapping Canada's vast "unpopulated" North had become an important part of national technological culture by the 1940s. More importantly, imagining the country as unimaginably big, so big that only Canadian technological ability could make anything useful of a landmass of that size, was as old a concept as the nation itself. By flying on their state airline's Canadian-build aircraft, increasingly large numbers of Canadians could finally place themselves inside that history and that imagined geography and experience their country in a uniquely modern way.

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[242] "First Flighter" *Between Ourselves*, September 1950, 15.
[243] Quoted in Votolato, *Transport Design*, 173-174.

Conclusion: Space, Time, and the Postwar "Travel Boom"

By addressing the aviation-based annihilation of distance as a given, building a transportation teleology that placed airplanes at its conclusion, and emphasizing the visuality of flight, airlines, advertisers, and the media were primed to approach aviation as something increasingly mundane. The emerging focus in early promotions on what it felt like to fly—the comfort of the seats, the views out the window—was only possible because the scaffolding of the post-war "travel boom" was falling into place. By mid-century, tourism had become what historian Rick Popp has called "almost an exclamation point" to the increasing democratization of leisure. The rise of arcades, movie halls, ball parks, and other commercial amusements in the last decades of the nineteenth and first decades of the twentieth century added "short blasts of fun" to the weekly rhythms of industrial modernity in large cities.[244] This rhythm was further syncopated with the gradual addition, at least for the urban middle class, of annual vacations to beachside resorts, campgrounds, and other local or regional attractions.[245] This new cadence of labor and leisure was cemented by changes in labor policy that granted even blue-collar workers some paid vacation for the sake of the literal "recreation" of a more efficient labor force. Most public and private sector workers in most Canadian provinces had achieved mandatory one-week paid vacation leave by the end of the 1940s and paid vacations were an expected part of workforce bargaining agreements, as will be discussed in more detail in Chapter 4.[246] The

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[244] Richard K. Popp, *The Holiday Makers: Magazines, Advertising, and Mass Tourism in Postwar America* (Baton Rouge: Louisiana State University Press, 2012), 12. For more on public amusements, see David Nasaw, *Going Out: The Rise and Fall of Public Amusements* (Cambridge: Harvard University Press, 1999).

[245] The wilderness holiday was especially popular in Canada's largest cities. See Patricia Jasen, *Wild Things: Nature, Culture, and Tourism in Ontario, 1790-1914* (Toronto: University of Toronto Press, 1995).

[246] Karen Dubinsky, "'Everybody Likes Canadians:' Canadians, Americans, and the Post-World War II Travel Boom," in *Being Elsewhere: Tourism, Consumer Culture, and Identity in Modern*

discourse of vacationing, even if few could afford lavish trips abroad or even outside their state or province, was becoming a regular part of North American narratives of leisure and consumption. Even though air travel appeared to be the most elite, so to speak, method by which everyday North Americans could vacation, it was still a part of the new postwar "travel boom" landscape. Increasing number of middle- and even working-class Canadians could imagine availing themselves of air travel thanks to this tourism imaginary. Even if they could not afford to fly TCA, the discourse was falling into place that would help them believe they might, and airlines and advertisers made use of this new discourse by selling their services as an experience rather than selling the idea of aviation as some sort of symbolic ideal.

In the postwar pre-jet age, before air travel became a form of mass transit and after wartime diffusion technologies increased its accessibility, regularity, and reliability, Trans-Canada Air Lines had a void to fill. Rail was becoming less practical, especially as emerging geographic realities required a longer reach, but its mythic status could not be disrupted, necessary as it was for a nation scrambling for identity in the new global landscape. In the public-facing material released in and around its decennial year, TCA worked inside the rhetoric of postwar high modernity, centralizing human techno-scientific triumphs over the natural world while delicately maintaining the value of this natural world to Canadian national identity. As a public airline, its growing focus on public relations through the late 1940s and early 1950s meant that TCA represented what appeared to be a state narrative of technology, environment, and

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Europe and North America, edited by Shelley Baranowski and Ellen Furlough (Ann Arbor: University of Michigan Press, 2001), 322. Although I cannot find statistics for Canada beyond the general ones cited in Dubinsky, 85 per cent of union agreements in 1944 in the United States had vacation provisions, and 93 per cent did in 1949.

Susan Sessions Rugh, *Are We There Yet? The Golden Age of American Family Vacations* (Lawrence: University Press of Kansas, 2008), 17.

nation. In what remains the only cultural history of Canadian aviation, Jonathan Vance argues that Canada was "a nation tailor-made to be exploited by air."[247] This wasn't just because of Canada's sheer size and geographic variability, but because it was a nation clamoring for new, modern technological creation stories of its own. Aviation, especially commercial aviation, was easy to fold into already-established sea-to-sea technological nationalisms established around Confederation. It also fit into the environmental constructions of Canada as a special place with a unique set of geographic and climatic obstacles to mobility and unity. Canada had to be *made* tailor-made to be exploited by air, and TCA's public-facing material in and around its decennial year reveals the uses of, contradictions in, and anxieties about such a project that were emerging as TCA worked to find a place inside modern Canadian identity formation.

Discursively manipulating time and space—those great axes of modernity—in its early public-facing material reveals how TCA placed itself inside collective visions of modern Canadian envirotechnicality. In its brochures, advertisements, publicity broadcasts, and employee newsletters, TCA self-fashioned as a key part of the Canadian past and the Canadian future, premised as it was on the further reduction of distance by communications technologies. However, TCA could not engage with this rhetoric without a reason to; it needed a homegrown technological standard-bearer to carry it and its services into the air age. It needed a guiding light, a headline act. It needed a North Star.

[247] Vance, *High Flight*, 134.

2. The Canadair North Star and Seasonal Canadian-ness

Trans-Canada Air Lines' first new aircraft after the end of the Second World War was the Canadair DC-4M North Star, which entered service in the spring of 1947.[248] Built by private firm Canadair at a government-owned plant outside Montreal, the North Star featured for the first time in Canada a number of new systems that had been developed during the war such as cabin pressure, electric de-icing, and long-range navigation. It was also the first airplane custom-designed to TCA's specifications and saw limited use in the private sector (and even less use outside Canada).[249] The North Star therefore became a platform on which battles over Canadian industry and government, everyday mobility, and what makes a technology "Canadian" played out. I have organized this chapter around two sets of problems that TCA was facing by the end of the war, as well as some discursive techniques TCA used to solve those problems. The first problem was how to transition its fleet from its wartime mobilization to a purely civilian operation catering to the new needs and desires of postwar life. I consider these "technological" problems, as they mainly had to do with the enrolment of wartime diffusion technologies such as cabin pressurization, de-icing, and tricycle landing gear, as well as the choice of airplane in general. Instead of purchasing an off-the-line model or modifying its Lancastrians, TCA decided to combine an American fuselage with a British engine and add what became known as the "all-weather" technological suite. This decision became the defining technological aspect of how the airline represented itself as especially Canadian. In the first part of this chapter, I will trace how and why the North Star took the form that it did, replacing what might be seen as an ordered,

[248] See Figure 3 for a promotional image of the North Star.
[249] Both Canadian Pacific Airways and the British Overseas Airways Corporation used DC-4M2s, although not in large numbers, not until the late 1940s, and without the name "North Star." At Canadian Pacific they were called "Canadair Four" and at BOAC they were called "Argonaut."

military flying experience based on efficiency, power and output with a desirable, comfortable, accessible flying experience for a new set of postwar consumers.[250]

The second set of problems was what might be called "environmental." I use this term to refer to Canadian geographies and climates, as well as TCA's political and corporate climate in a more colloquial sense. As I will show in the middle sections of this chapter, TCA could build whatever advanced planes it wanted, but it would not matter if passengers did not purchase tickets to fly on those planes. TCA suffered financially in the first few years of North Star service, and the airline and its technological choices were maligned by critics in Parliament and the media. The exact nature of these criticisms and their impact on Canadian politics is the subject of Chapter 3. In this chapter, I will show how TCA's responses to these criticisms reframed them as "environmental" and a product of Canadian geography and climate. Seasonal imbalances in passenger traffic, which were a concern at all airlines, were alleged to have hurt TCA especially because of the perceived harshness of Canadian winters. As a response to both of these sets of problems, the North Star became TCA's literal and figurative vehicle for its postwar self-fashioning, and the final section of this chapter will be devoted to how the North Star appeared in TCA's promotional material and fit into the airline's already-established vision of what it imagined itself doing for its individual passengers, for technological development, and for the nation as a whole.

[250] Gijs Mom traces a similar phenomenon in the family car in the 1920s and 1930s in "Orchestrating Automobile Technology: Comfort, Mobility Culture, and the Construction of the 'Family Touring Car' 1917-1940," *Technology and Culture* 55:2 (2014): 299-316.

Technological Problems: Building the North Star

TCA began searching for a new aircraft to add to its fleet in 1943. That spring, Prime Minister William Lyon Mackenzie King reminded the House of Commons that TCA had "already been designated as the instrument of the Canadian government in air transport service across the north Atlantic" by virtue of the *Trans-Canada Air Lines Act*.[251] As discussed in Chapter 1, this meant that TCA took over the previously unaffiliated Canadian Government Trans-Atlantic Air Service (CGTAS), using modified Lancaster bombers known as "Lancastrians" to ferry government and armed forces mail and passengers to Britain. These airplanes were simply not suited for the demand TCA expected in peacetime, and the airline began looking for new airliners while the Lancastrians were still in service. In the words of aviation historian Larry Milberry, TCA's search for replacements for the Lancastrians "covered the whole aviation scene" and found it wanting.[252] After visits to British and American manufacturers, it was "soon obvious," TCA Director of Engineering J.T. Dyment wrote in a report to Howe, that "the design of a four-engined airplane for postwar use did not exist in 1943," but what he called the "planned DC-4" looked to be the airline's best hope.[253] The DC-4, designed by Douglas Aviation in the United States before the war, had been re-imagined as the popular C-54 "Skymaster" troop transport through 1942 and 1943 with the civilian model placed on the back burner. Historian Daniel Rust has suggested that these planes, as well as the military version of the DC-3, primed a generation of travelers to be air-minded by exposing young GIs to

[251] Canada, *House of Commons Debates*, April 2, 1943 (William Lyon Mackenzie King), http://parl.canadiana.ca/view/oop.debates_HOC1904_02/757?r=0&s=1.
[252] Milberry, *The Canadair North Star*, 15.
[253] Report by J. T. Dyment, "TCA Story of the North Star Growth from Idea to Airliner," c. 1947, C. D. Howe Papers, MG-27-B20, volume 94, LAC.

air travel as an acceptable form of long-distance transportation.[254] DC-4s were adopted en masse by American airlines after the war, but TCA executives had known early that they wanted their postwar fleet to be pressurized based on their wartime experience flying the Atlantic, and military production demands had prevented Douglas from designing a pressurized version.[255]

TCA was therefore left with what Pigott calls a "Hobson's choice": continue to use Lancasters and wait for Douglas's first pressurized airliner (the DC-6, already in development), or buy an inferior aircraft (the British Avro Tudor).[256] The best option, TCA and Howe eventually agreed, was building a new plane by modifying the DC-4 to meet the airline's postwar needs and adding pressurization and an improved powerplant. The DC-4 fuselage's performance in a variety of climates was key in this decision and helped it fit into Canadian envirotechnical paradigms; one 1946 promotional pamphlet suggested it "knew the sub-zero winds of the Arctic and the blazing heat of sand-swept tropics."[257] Furthermore, because of its widespread use as the C-54, TCA was under the impression that the airframe had "been through its teething troubles" and would therefore require relatively little maintenance.[258]

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[254] Rust, *Flying Across America*, 125.

[255] To maintain a reliable passenger service, TCA estimated that its planes needed to fly over the Atlantic at an altitude of up to 25,000 feet—"a considerable height in those days," Smith writes—which required oxygen masks for passengers unless the cabin was pressurized. Smith, *It Seems Like Only Yesterday*, 98-99.

[256] Victory Aircraft in Malton had been asked to build some test Tudors, which was part of the reason George Drew was surprised when the North Stars were eventually built in Montreal. Peter Pigott, *Wings Across Canada: An Illustrated History of Canadian Aviation* (Toronto: Dundurn, 2002), 115. See 115-118 for his discussion of the North Star.

[257] Pamphlet "Air Lines Map of Trans-Canada Air Lines and Connections in Canada & United States," 1947, Air Canada Collection 005.003.01, CASM. One of Canadair's first moves as a discrete manufacturer was to buy all the cheap surplus C-54 and DC-3 parts the company could get its hands on.

[258] From a 1945 report quoted in Milberry, *The Canadair North Star*, 16.

Canada obtained DC-4 manufacturing licenses in 1944, and, after a lengthy, politically-charged process, the popular British Rolls-Royce Merlin engine was chosen as the power plant. Aside from the public relations value in their use on some of Britain's most iconic warplanes—Supermarine Spitfires, Avro Lancasters, and de Havilland Mosquitoes—Merlins were also seen to have the same climatic flexibility as the DC-4 fuselage. Not only had they had been used around the world in wartime, but they were more powerful than any of TCA's North American options. The extra power was necessary since "Canadian airlines require more take-off power for the same airplane than most of the United States lines because our runways are snow-covered for a large portion of the year," as one engineering report put it.[259] The main reason that the Merlins were chosen, however, was that Rolls-Royce, desperate to break into the postwar North American market, added a "never-be-sorry" clause to their warranty, in which Rolls-Royce essentially guaranteed to service their engines for a reasonable cost.[260] Furthermore, Rolls-Royce had a better record of maintenance and repair than TCA's American choices, largely because it manufactured the entire engine. In an early memo, Dyment expressed his frustration with the "American habit" of contracting out the manufacture of cowl flaps, exhaust systems, air intakes, and other accessories, which created an "evasion of responsibility" and made "the elimination of troubles" much more difficult and expensive.[261] This was a bit of dramatic irony, as the public did not see the Merlins as Rolls-Royce's responsibility when they failed, but instead placed the blame squarely on TCA; the airline spent the late 1940s trying not to say "sorry" for its engines.

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[259] Report by J. T. Dyment, "TCA Story of the North Star Growth from Idea to Airliner," c. 1947, C. D. Howe Papers, MG-27-B20, volume 94, LAC.
[260] Pigott, *National Treasure*, 259; Ron Pickler and Larry Milberry, *Canadair: The First 50 Years* (Toronto: CanAv Books, 1995), 49; Milberry, *The Canadair North Star*, 16-20.
[261] Report by J. T. Dyment, "Engine Selection for the Douglas DC-4," July 13, 1944, quoted in Milberry, *The Canadair North Star*, 19.

Finally, the Canadian Vickers plant in Cartierville, QC was released to Canadair, Ltd., the newly separated air arm of ship and flying boat manufacturer Canadian Vickers, and began building Canada's newest transports.[262] Canadair's very existence as an aircraft manufacturer is owed to the modified DC-4s. Canadian Vickers had been offered the contract in March 1944, and immediately sent engineers and "assembly and planning people" to the Douglas plant in California and Rolls-Royce in England.[263] As this was going on, the general manager of Canadian Vickers told Ottawa that the company could not sustain both its previous naval contracts and a new aircraft manufacture at its Cartierville plant and was planning to get out of the aircraft game entirely. By the end of the year the government had taken control of Cartierville and leased it to the newly-formed Canadair with the express purpose of building modified DC-4s. The new company was headed by former Canadian Vickers manager Benjamin "Benny" Franklin, who had been hand-selected by Howe not because of his aviation expertise (Milberry notes that "he had none") but because of his management experience.[264] Franklin and his team at Canadair immediately began buying surplus aircraft and parts "at scrap metal prices" for the C-54 and DC-3, the workhorse airliner of the late 1930s and 1940s that was supposed to be phased out by the new DC-4s.[265] This turned out to not be the case—TCA and other airlines

[262] Canadian Vickers was founded in 1911 as a shipbuilder. By the early 1920s, it had expanded into the nascent bush flying industry, most notably overhauling surplus Curtiss HS-2L flying boats for Laurentide Air Services, generally considered Canada's first commercial bush flying outfit. It eventually became known as a flying boat specialist—the Vickers Vedette flying boat was among the first purpose-built Canadian bush planes—and built Consolidated PBY and Canso flying boats during the Second World War. Cartierville itself had been an airfield since 1911, was used as a military and airmail hub, and was (and remains) a center of aeronautics manufacturing in Canada. See Pickler and Milberry, *Canadair*, 13-35.
[263] Pickler and Milberry, *Canadair*, 32.
[264] This was typical of Howe, who was less interested in technical expertise than ability to run a business. Milberry, *The Canadair North Star*, 20.
[265] Pigott, *National Treasure*, 256.

used DC-3s into the 1960s on their short-haul flights—and Canadair eventually became a global center for repairing and refurbishing older Douglas models.[266] In the 1940s, however, Canadair's main technological focus was the modified DC-4, destined to be used by both TCA and the RCAF in pressurized and non-pressurized forms respectively. Designated the "DC-4M" (for "modified,") the new airplane went into production in 1944.

TCA attempted to publicize the airplane almost immediately. This was, after all, a new paradigm of passenger comfort and accessibility, as I will discuss in the next section. Artist's renderings of the airplane were prepared for advertising purposes in late 1944 and a newspaper and magazine advertisement—a relatively rare sight during Symington's tenure as president—was drawn up. The advertisement was equal parts backward- and forward-looking, discussing both the role of "Canada's National Air Service" in linking Canada's far-distant cities and how the airline's forthcoming aircraft would further cement that role.[267] TCA Public Relations Director W. S. Thompson was unusually enthusiastic about this campaign, telling Symington in a note attached to an early proof that publishing it in all ninety Canadian dailies would be "productive of good" heading into 1945.[268] Symington did not share Thompson's excitement and limited the newspapers running the ad to those in major TCA hubs such as the Montreal *Gazette* due to financial concerns.[269] Regardless, this early attempt to advertise what would eventually

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[266] Randall Wakelam, *Cold War Fighters: Canadian Aircraft Procurement, 1945-54* (Vancouver: UBC Press, 2011), 42-43.
[267] Letter from W. S. Thompson to H. J. Symington, "T.C.A.'s New Four-Engined Planes," 14 December 1944, Office of the President papers, Air Canada fonds, RG-70, volume 6, LAC. Advertisement, "T.C.A. Looks Ahead," 1944, Office of the President papers, Air Canada fonds, RG-70, volume 6, LAC.
[268] Letter from W. S. Thompson to H. J. Symington, 28 December 1944, Office of the President papers, Air Canada fonds, RG-70, volume 6, LAC.
[269] Letter from H. J. Symington to W. S. Thompson, 28 December 1944, Office of the President papers, Air Canada fonds, RG-70, volume 6, LAC. This exchange also revealed to me a vital airline advertising superstition: it is bad luck to show an airplane flying West. Thompson's

become the North Star hints at what was to come: using the airplane itself as a stand-in for air travel, TCA, and the value that they both had to mid-century Canada.

Symington was right to curb Thompson's enthusiasm. Production of the new plane was painfully slow through 1945 and 1946. Symington complained of the "pretty heavy pressure" and "good deal of criticism" he and his airline were under because of this, especially since TCA did not purchase other aircraft to make up for the rise in postwar passenger demand.[270] TCA did purchase three DC-3s in 1945, but the fact that they were a pre-war design, unable to make the Atlantic crossing, and were primarily used for cargo made them an unsatisfactory solution even in the short term. These production delays were caused by technological issues, especially in terms of the pressurization system, and also labor disputes at Stelco, Canada's largest steel manufacturer, and they severely limited TCA's ability to introduce new routes, self-promote, and placate critics.[271] The highly publicized official "christening" ceremony of the new aircraft that was scheduled for July 7, 1946, for example, had to be performed with a non-pressurized military version. In the weeks leading up to the ceremony Howe, Symington, and Franklin wondered if they could even use the newly chosen name "North Star" in their publicity because

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earliest proofs of this advertisement, which have been lost, were rejected by Symington because "a plane flying West is a thing [airlines] never use in that it is supposed to involve disaster. It is also true," he added, "that a plane going...East gives a better impression of speed and power." Letter from H. J. Symington to W. S. Thompson, 19 December 1944, Office of the President papers, Air Canada fonds, RG-70, volume 6, LAC.

[270] Letter from H. J. Symington to Donald W. Douglas, 2 October 1945, Office of the President papers, Air Canada fonds, RG-70, volume 16, LAC. TCA did purchase three DC-3s in 1945, but the fact that they were a pre-war design, unable to make the Atlantic crossing, and were primarily used for cargo made them an unsatisfactory solution even in the short term. Ashley, *The First Twenty-Five Years*, 25.

[271] For more on the pressurization system's troubles, see Milberry, *The Canadair North Star*, 34-37. On Stelco, see Craig Heron and Robert Storey, "Work and Struggle in the Canadian Steel Industry, 1900-1950," in *On the Job: Confronting the Labour Process in Canada*, edited by Craig Heron and Robert Storey (Montreal and Kingston: McGill-Queen's University Press, 1986), 210-244.

it was not truly a North Star, or if a name chosen by the RCAF (the military's two finalists were "Dominion" and "Beaver") had to be used instead.[272] Luckily for them, Franklin had to delay the final trial flights, moving the ceremony back to July 20. As a result, there was sufficient time to work out that "North Star" could be used at the ceremony—it was eventually used colloquially to designate the military type anyway. It was also lucky for Howe, Symington, and Franklin that the press could not tell the difference between the two models.[273] Ceremonial considerations aside, TCA still had to put its passengers, who were clamoring to participate in the postwar "travel boom," in something, and the pressurized versions of the North Star were months from being ready. In this regard, being a state airline had it advantages; TCA was able to borrow half a dozen non-pressurized DC-4M1s from the RCAF in late 1946 as a stopgap measure. TCA began training flight crews on these aircraft in November 1946, started flying them in April 1947, and had replaced them entirely with the airline's proprietary pressurized DC-4M2s by midsummer. Even so, these technological problems had disrupted not only the airline's anticipated service—such as the revenue lost because the North Stars weren't ready for the 1946 summer tourist season—but also the vision of Canadian technological ability, mobility, and accessibility that TCA was beginning to cultivate for itself, its services, and its machines.

Naming the North Star

Naming individual aircraft, aircraft types and even the entire fleet was a relatively high priority at TCA in order to develop name recognition and encourage loyalty to the airline,

[272] Letter from Symington to Howe, 18 June 1946, C. D. Howe fonds, MG027 B20, vol. 94, LAC.
[273] "Huge Air Transport is Christened North Star at Colorful Ceremony," *Montreal Gazette*, July 22, 1946. The official christening was done by Howe's wife, Alice.

especially in the rapidly expanding postwar air travel landscape.[274] "DC-4" or "DC-4M" simply would not do. Even while preparing the first round of publicity in 1944, TCA public relations executives suggested that it was too different from Douglas' original flavor to warrant the DC-4 name, and Douglas did not include TCA in its publicity as an operator of the DC-4. In late 1944, Director of Public Relations W. S. Thompson floated a few names—"Sky Cruiser," "Sky Courier," and "Sky Liner"—for the advertisement discussed above, although the eventual campaign omitted any specific names entirely.[275] Choosing a name for TCA's four-engined airliners gained a new urgency in the postwar years, especially as TCA prepared for them to enter service. First, the aircraft was repeatedly (and mistakenly) referred to in internal correspondence and the popular press as the "DC-6" through spring 1946. This prompted no less an authority than Donald Douglas, President of Douglas Aircraft, to remind Symington that "there is no provision [in the original 1944 license agreement] for the use of Douglas symbols other than 'DC-4.'" Douglas was prompted to "suggest that T.C.A. select a name for the Canadian-built aircraft rather than continue using a model designation composed of symbols."[276] Symington responded immediately—using the name DC-6 was "quite wrong and shouldn't have been done"—and by midsummer the airline had settled on "Northern Star" for the aircraft and

[274] There are a handful of reports, memoranda, and correspondence about name development—although the fleet of Douglas DC-3s (used before and during the North Star's service), were considered a lost cause, the new airliners still had some potential. See Report by W. F. English, "Aircraft Names," 13 January 1947, Office of the President papers, Air Canada fonds, RG-70, volume 8, LAC.

[275] Letter from W. S. Thompson to H. J. Symington, 14 December 1944, Office of the President papers, Air Canada fonds, RG-70, volume 6, LAC.

[276] Not only would this provide the airline with some "publicity usefulness," but it would also eliminate confusion with the DC-4Ms used by the Royal Canadian Air Force. Letter from Donald W. Douglas to H. J. Symington, 16 April 1946, Office of the President papers, Air Canada fonds, RG-70, volume 16, LAC.

"Skyliners" for the entire fleet.[277] It is unclear how Northern/North Star was first thought up—allegedly, Franklin suggested it after he heard some engineers batting around the name "Polaris"—but airline officials did explore other options.[278] During the summer of 1946, Symington was interviewed by the *Toronto Star Weekly*, and the ensuing article suggested the airline was looking to name their newest airliner and fleet. Although not directly prompted, somewhere around 150 readers sent the airline an assortment of "weird and wonderful" name suggestions, which Vice President Bill English forwarded to Symington in their entirety. The suggestions speak to both Canadian national symbols and belief in the global future of air travel: animals such as "Arctic Tern," "Muskox," and "Snow Goose"; historical and geographic "Frontenac," "Coeur [sic] de Bois," "Niagara Falls," and "Hudson Bay"; and futuristic-sounding portmanteaux such as "Can-Nation-Air" and "Supersym." The most popular? "Beaver," and variations such as "Flying Beaver" and "Beaver Airlines." Most importantly here, about 10% of the suggestions referenced climatic and "northern" imagery such as "Chinook," "North of the Border," and "Aurora Borealis." English eventually concluded that "I don't see anything better than the present designation, 'North Star,'" and the name stuck.[279]

As soon as it entered popular discourse, "North Star" immediately gained traction among airline officials and, apparently, the public.[280] Although the name had been chosen somewhat

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[277] Letter from H. J. Symington to Donald W. Douglas, 10 May 1946, Office of the President papers, Air Canada fonds, RG-70, volume 16, LAC.
[278] According to Milberry, he also came up with the name "Canadair." Milberry, *The Canadair North Star*, 27.
[279] I'm assuming that "Supersym" is in reference to Symington. Letter from W. F. English to H. J. Symington, 19 October 1946, Office of the President papers, Air Canada fonds, RG-70, volume 16, LAC.
[280] Male TCA staffers in Vancouver began performing in drag as the "North Starlettes" at company functions, for instance. See "The North Starlettes at Vancouver," *Between Ourselves*, February 1952.

organically, the campaign to strike all mentions of "DC-4M" from TCA's public-facing material was swift and deliberate. Howe himself pressed Symington, Thompson, and their staff to quickly "fasten the name 'North Star' to these aircraft as a type name" by emphasizing it in their publicity related to various inaugural flights through mid-1947.[281] Despite it being, as English claimed, an "almost accidental process," the airline had "profited enormously" from "North Star," since:

> "Ease of identification and recognition is the very condition of familiarity. Given names that tickle the fancy, that evoke mental pictures, that appeal to popular loyalties—and that therefore persist in the memory—the battle is half won...The name is a good one in that it possesses a degree of visual authority and therefore vitality and value."[282]

The "visual authority" in the case of the North Star referred less explicitly to envirotechnical and more to celestial—and even subtly religious—discourse. The North Star was to shine bright in what Douglas called the "Canadian Heavens" in a 1947 public statement, carrying "forward the proud heritage of Canadian achievements" in the air age and providing direction to the next generation of air travel.[283] The celestial rhetoric showed up just about everywhere; English wrote in his 1946 annual report to employees, for instance, that "the glint of the North Star became steadily brighter" that year.[284] The *Between Ourselves* employee newsletter called April 15, 1947 the "most significant day in the whole of TCA's bustling career" because "on that day a shining

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[281] Letter from C. D. Howe to H. J. Symington, 23 May 1947, C. D. Howe fonds, MG027 B20, vol. 94, LAC.
[282] Report by W. F. English, "Aircraft Names," 13 January 1947, Office of the President papers, Air Canada fonds, RG-70, volume 8, LAC.
[283] "Salute to the 'North Star,' *The Globe and Mail,* July 25, 1946, 7.
[284] W. F. English, "To the Employees of Trans Canada Air Lines, a Report on the Company in 1946," 1947, Air Canada Collection 005.003, CASM.

new North Star" was to be unveiled; "although the North Star equipment is new, we must put our faith in it."[285]

This sort of imagery reached its peak in 1947, when the airline used the forward-thinking North Star as a way to look back on TCA's, and Canada's, aviation achievements during its decennial. For instance, new transatlantic passengers were given cards featuring "Some North Star Facts" that claimed:

> "High in the northern sky, a new star shines brightly. It is called 'North Star' in tribute to that age-old guide of the world's travellers. But this is no astral body in the usual sense. It is a great airliner, the first of its kind. Built in Canada, the North Star represents the skills of nation long-famed for aviation achievement in peace and war."[286]

Since the North Star's first service was between Montreal and Britain, decennial promotions made a point to place the North Star, and Canadian aviation more generally, at the pinnacle of a long history of crossing the Atlantic. As discussed in Chapter 1, TCA manipulated history and geography to make aviation seem like a natural part of the Canadian transportation teleology and maintain an Atlantic orientation. More importantly here, this symbolism was heaped upon one specific airliner. One week before TCA began flying its North Stars to Britain (on April 15, 1947), the airline published large newspaper advertisements in every major Canadian daily introducing the service. The majority of the ad space is taken up by an illustration of the North Star—a four-engined silhouette which proved to be a valuable symbol at TCA for half a decade—but the word "Britain" is given the ultimate focus in copy. The planes themselves were

[285] Don McLeod, "The North Star Unveiled," *Between Ourselves*, April 1947, 2.
[286] Card "Some North Star Facts," c. 1947, Air Canada Collection 005.003, CASM.

the "new stars in the sky" and "Canadian built," but would "bring you new enjoyment, dependability and speed in trans-Atlantic travel."[287]

"War Wonders" and Canadian-ness

Canadian press reports capitalized on the aircraft's British-American-Canadian heritage and evocative name, suggesting over and over that the North Star was, in John Fisher's words, "Canadian as the Maple Leaf." Fisher suggested in 1947 that inside the new DC-4 "you'll find the personality of Canada" since "like Canada—like TCA itself, it is a compromise."[288] In another story a year later he called it the "middle road [between]...American efficiency and British caution."[289] Even Pigott, in his 2002 illustrated aviation history for a popular audience, called it "as Canadian as the *Bluenose* schooner or the RCMP Musical Ride."[290] What made the North Star appear especially Canadian in 1947, and why was its being Canadian so important? It was not simply that the North Star was the only one of TCA's postwar airliners to be built in Canada, but also that it was the subject of a deliberate attempt by TCA to make it *seem* Canadian by connecting its new technological systems to Canadian mobility. In the last few years of the 1940s and first few of the 1950s, the North Star became more and more Canadian inside TCA's public-facing discourse, especially as the airline's advertising became more sophisticated. The North Star was the first new airliner that TCA was able to advertise using its own discrete advertising department, which in turn meant that the immediate postwar aviation discourse in

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[287] Letter from W. S. Thompson to C. D. Howe, 11 April 1947, C. D. Howe fonds, MG027 B20, vol. 94, LAC; Advertisement, "Fly TCA to Britain," *Montreal Gazette*, April 9,1947, 2.
[288] Script, "John Fisher Reports," April 6 1947, C. D. Howe Papers, MG27-B20, vol. 94, LAC.
[289] "John Fisher Reports: Up and Down," 2 May 1948. RG-70, volume 254, Air Canada fonds, LAC.
[290] Pigott, *Wings Across Canada*, 115.

Canada was saturated with the North Star. The North Star and TCA publicity grew up together, and even though the public was not as quick to embrace the North Star as TCA executives hoped, it was cemented in public consciousness as a product of TCA, a product of Canadian techno-scientific ability, and a product of Canadian envirotechnicality.

Until this period, air travel was generally reserved for business or elite travellers; it was expensive, uncomfortable, and lacked the infrastructure network to support large numbers of passengers. As the war ended, however, there appeared to be a great deal of anticipation that technologies of all sorts developed for military use might trickle down to civilians; science magazines waxed rhapsodic about the "war wonders for you" that would make their way into everyday life, including dehydrated food, nylon shoelaces, and walkie-talkie radios.[291] Historians have looked at this "wartime-to-peacetime technological transfer" from a number of angles, using case studies such as nylon, bulldozers, pest control, and food.[292] In his work on imagined postwar architectural futures, for example, historian Andrew Shanken shows how popular discourse about the war front was "nestled" up to discourse about the home front; "readers gained a preview of the 'postwar,' represented as the tangible aggregation of appliances, steel, glass, plastic, lighting," and other materials and goods through advertising "that completed the calculus between the war effort and postwar consumption."[293] As a technological transfer, the

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[291] "War Wonders For You," *Popular Mechanics*, February 1945, 65-66.
[292] Francesca Ammon, *Bulldozer: Demolition and Clearance of the Postwar Landscape* (New Haven: Yale University Press, 2016), 12. See also Bryan McDonald, *Food Power: The Rise and Fall of the Postwar American Food System* (New York: Oxford University Press, 2017), especially 48-73; Jeffrey Meikle, *American Plastic: A Cultural History* (New Brunswick: Rutgers University Press, 1997), especially 125-183; Ed Russell, *War and Nature: Fighting Humans and Insects with Chemicals from World War I to 'Silent Spring'* (Cambridge: Cambridge University Press, 2001), especially 165-183; Mimi Sheller, *Aluminum Dreams: The Making of Light Modernity* (Cambridge: MIT Press, 2014), 84-114.
[293] Andrew Shanken, *194X: Architecture, Planning, and Consumer Culture on the American Home Front* (Minneapolis: University of Minnesota Press, 2009), 96-97.

technologies on board a North Star were not quite as obvious to their users as consumer technologies such as plastic appliances—passengers did not *own* the navigation system and only purchased *access* to a pressurized cabin—but it was still a part of the "colonizing of scientific and technical values upon the material realm of everyday life" that was part of the postwar return to normalcy.[294]

There was a selection of wartime aviation technologies, such as "LORAN," or long-range navigation, autopilot mechanisms, and electric de-icing, that were expected to (and did) appear on postwar airliners, but the technological system most exciting to both the popular press and airline public relations was cabin pressurization. Put simply, cabin pressurization technologies make the air pressure inside an aircraft's cabin as close to ground-level pressure as possible, even when the airplane is 30,000 feet in the air. This raises the operational ceiling of the aircraft, and, more importantly to the 1940s popular press, it also increased passenger comfort since, as one *Popular Science* writer suggested, there would be no ear pain "from altitude changes…no danger from lack of oxygen, no discomfort from cold, no gas pains caused by reduced air pressure, and no chance of suffering the agony of aeroembolism, or 'bends.'"[295] According to an article in *Popular Mechanics*, these technologies would turn airliners into "parlor cars with wings" flying through the "silky smoothness of the substratsophere."[296]

The North Star was the first airliner in Canada to incorporate all of what CBC personality Stephen Brott called "the latest safety gadgets" in his coverage of its first flight: LORAN, autopilot, enhanced radio and weather equipment, electric de-icing on the propellers, and cabin

[294] Meikle, *American Plastic*, 128.
[295] Eric Sloane, "Why Pressure-Cabin Transports?," *Popular Science*, March 1945, 91.
[296] "Parlor Cars with Wings," *Popular Mechanics*, July 1944, 8-9.

pressurization.[297] Of all of these, with the exception of perhaps LORAN, cabin pressurization was the diffusion system that most interested the Canadian press and, subsequently, airline public relations because it re-framed Canadian flying in terms of comfort and the individual passenger experience. The *Globe and Mail*, for instance, introduced the newly pressurized North Stars to the public simply by stating that no less of an authority than C. D. Howe had flown in one and "found that the plane removed all the discomfort associated with changes in altitude."[298] In its own publicity material, TCA divided these "gadgets" into two loose categories: "operations" features, such as radio guidance, and "comfort features," such as upholstered chairs and climate control. Comfort features were an easier sell than operations features because they had a more tangible impact on the everyday experience of flight, but operations features were the ones that allowed TCA to highlight its leading contributions to world aviation. Cabin pressurization appeared in both categories. Sometimes it appeared alongside descriptions of the carpeting and powder room—one 1949 brochure devoted two of its eight pages to describing the North Star's interior style, but also how "the cabin is pressurized, so that, even at high altitudes passengers may breathe normally, without oxygen masks"—and sometimes there were rudimentary attempts to explain how it worked.[299] A *Between Ourselves* article from 1948 reminded TCA employees that only "elementary physics" was necessary to understand how the system worked, "although the North Star passengers are probably unaware of...[this] engineering

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[297] Script, "International Broadcast to the United Kingdom and Caribbean," April 8, 1947, C.D. Howe Fonds, MG27 B20, vol. 94, LAC. For more on the North Star's de-icing systems, see Renald Fortier, *Propellers* (Ottawa: National Aviation Museum, 1996), especially 22-24. For more on the history of de-icing technologies from an American perspective, see William Leary, "A Perennial Challenge to Aviation Safety: Battling the Menace of Ice," in *Reconsidering a Century of Flight*, ed. Launius and Bednarek, 132-150.

[298] "Howe Convinced Pressurized Plane Craft for Atlantic," *The Globe and Mail*, October 11, 1947, 7.

[299] Brochure, "North Star Over the Atlantic," c. 1946, Air Canada Collection 005.003, CASM.

accomplishment."[300] Despite being assigned a low level of awareness, everyday passengers were occasionally offered at least a basic explanation; a "Facts About Flying" passenger handbook from 1947, designed to clear up the "'mystery' of flight" to nervous passengers, answered the frequently-asked question: "What is a pressurized cabin?"

> "Without one, you would be quite uncomfortable at the higher cruising altitudes where the four-engined aircraft frequently move. Two miles or more aloft, the air is too thin, too oxygen-starved, for comfortable breathing. The modern airliner has high-powered blowers, or fans, to press extra air into the sealed cabin. Thus, the pressurized air is a 'bubble' of breathable air riding the rarified atmosphere at which the 'North Stars' normally cruise."[301]

The explanation continued, providing descriptions of the cubic feet of air fed into the cabin and how quickly air is circulated, but the focus was still explaining to the everyday passenger why pressurized cabins made the North Star so *comfortable*. Design historian Gregory Votolato argues that cabin pressurization was "possibly the single greatest technical innovation that changed the nature of passenger air travel" precisely because it provided passengers with "a level of flying comfort previously unknown."[302] The comfort afforded by pressurized cabins was not imagined as particularly Canadian in TCA's public-facing material, but it was part of a suite of technological systems, many of which had been transferred from military applications, that helped the North Star as an assemblage appear to be the perfect Canadian machine built to perform for Canadian passengers in Canadian conditions.

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[300] "Flying With Their Feet on the Ground," *Between Ourselves*, Midsummer 1948, n.p.
[301] Pamphlet, "Facts About Flying TCA: Passenger's Handbook," 1947. Air Canada Collection 005.003, CASM.
[302] Votolato, *Transport Design*, 198.

The interior of the North Star itself was also part of creating that experience. Equally as important as the engines and fuselage was the interior of the North Star which was designed "to create a restful, warm and harmonious atmosphere" in which "physical comfort is supplemented by psychological ease."[303] In the first few decades of commercial aviation, aircraft interiors were designed to mimic other forms of luxury transportation such as yachts, Pullman cars, and limousines. By the time the North Star was in development, however, there was an emerging set of demands from organizations such as the International Air Transport Association (IATA) that standardized aircraft cabins "with the assumption that engineering and safety would determine all aspects of design."[304] In his design history, Votolato traces some of these conflicts between "safety" and "engineering"-oriented guidelines and the needs of passengers, who were interested in comfort above all else. As sleepers and couches were replaced by aluminum-framed reclining chairs in the two- or three-abreast configuration twenty-first century passengers are familiar with, the interiors stopped mimicking luxury transportation and started mimicking the "comforting, domestic ambience" of parlors and sitting rooms.[305] Replicating familiar domestic spaces in uncomfortable technological environments allowed for the appearance of the democratization and domestication of air travel at a moment in which it really *was* becoming more accessible; it felt like you were sitting in *your own home*, not an inaccessible, unfamiliar luxury transport.[306]

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[303] "Looking in on the North Stars," *Between Ourselves*, May 1947, 14-15.
[304] Votolato, *Transport Design*, 194.
[305] Votolato, *Transport Design*, 200.
[306] For more on domestication of technology, especially in the context of modern life, see Rieger, *Technology and the Culture of Modernity in Britain and Germany*; Els de Vos, "Uncanny and In-Between: The Garage in Rural and Suburban Belgian Flanders," *Technology and Culture* 54:4 (2011): 757-787; Peter Soppelsa, "Reworking Appropriation: The Language of Paris Railways, 1870-1914," *Transfers: Interdisciplinary Journal of Mobility Studies* 4:2 (2014): 104-123.

TCA's North Star interiors were designed by Winnipeg-based designer Janet Lowe. Lowe was a graduate of the University of Manitoba's interior decorating program and replaced Diana Dudley, TCA's first "interior accommodations engineer," when she left the company to marry in the summer of 1946.[307] The *Winnipeg Tribune* reported that Lowe was "responsible for the final appearance and comfort of the cabin," and that although she was still debating a variety of colors— "beige for the floor, and perhaps some blue-green...maybe yellow, with light rust shades...and perhaps a light yellow ceiling"—she definitely planned for the North Star cabins to have "a Canadian touch."[308] This turned out to be a maple leaf motif in the curtains and drapes designed by celebrated weaver Karen Bulow, who had also been contracted by the CNR, the CPR, and the national headquarters of the Bank of Nova Scotia and was best known for her "hand-woven ties [that] are sported by many Canadian males of discerning taste."[309] Lowe later recalled that it was a "fascinating job," especially since the interior design played a part in operations. Not only was it "before all the wonderful plastics were invented" and therefore "the interior walls of an aircraft were covered with material to cut down on the noise," but even the length of the draperies had to be changed after early test flights to cut back on weight.[310]

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[307] Dudley was also a University of Manitoba interior design graduate. She designed the staff cafeteria at TCA's Winnipeg headquarters and the interiors for the Lancastrians and DC-3s. "Winnipeg Girl has Unique Job: Diana Designs Plane Interiors," *Winnipeg Tribune*, November 15, 1945, 2. I desperately wish I knew more about the "interior accommodations engineer" title, which doesn't seem to be used at other airlines, or widely outside the 1940s.

[308] Of course, the *Tribune* made a point of reporting the names of her parents and the apartment complex in which she (and they) lived. "Winnipeg Girl Decorates Canada's Latest Plane," *Winnipeg Tribune*, July 23, 1946, 11.

[309] "Karen Bulow and the TCA Curtains," *Between Ourselves*, November 1950. For a brief biography of Bulow, see Gail Crawford, *A Fine Line: Studio Crafts in Ontario from 1930 to the Present* (Toronto: Dundurn Press, 1998), 202-203.

[310] Pigott, *National Treasure*, 266.

The M1 and M2 models had markedly different cabins in terms of color and design. Besides the beige maple leaf drapes on the M2's windows and coatroom, which replaced green plaid ones on the M1, the terra-cotta faux-leather sidewalls were changed to a light beige and the seats, which were previously a selection of chartreuse, white, terra-cotta and beige plaids and stripes depending on the section of the cabin, were all instead upholstered with green tweed.[311] This was accompanied by a new outside paint job, which TCA more-or-less maintained until it became Air Canada in the mid-1960s. The M2's new "glad rags" featured a series of red and white bands along the fuselage "to emphasize longitudinal sweep," "Trans-Canada Air Lines" painted in sloping lettering long the bands to "prevent 'broken' lines and preserve the impression of speed," and a simplified 34-inch TCA logo on the nose. "Pretty handsome, we think!" wrote the editor of *Between Ourselves* in late 1947.[312]

All of these cosmetic changes, from the green tweed seats to the newly italicized "TCA" branding on the tail fins, were backed by an optimism that TCA's North Stars would represent both the latest in military-to-civilian transfer technology and an intangible Canadian-ness by virtue of being so cutting-edge and performing at climatic extremes. Fisher, for example, used his "Canadian compromise" simile in more than one broadcast. He also claimed—rightfully so, as far as I can tell—that the North Star was the second ever aircraft built in peacetime in an April 1947 broadcast, a claim that was repeated on CBC's *News Roundup* program two days later. It was, according to the *Roundup* reporter, a "tribute to Canadian industry" and "the pride of Canada," cruising along at 225 miles per hour and "capable of hopping" across the Atlantic in

[311] The M1 design scheme sounds absolutely *hideous*. I'm glad they changed it. "Looking in on the North Stars," *Between Ourselves*, May 1947, 14-15.
[312] "'Glad Rags' for the North Star," *Between Ourselves*, October 1947, 16-17.

ten hours.[313] Because the North Star's first route was transatlantic, rather than the sort of distance-spanning, nation-shrinking travel that had fueled earlier technological nationalism discourse, its early publicity was a mish-mash of "hopping the pond" and the Canadian transportation teleology discussed in Chapter 1. For example, despite what Thompson called "a minimum of ceremony" at the North Star's first regular service flight on April 15, 1947, John McCurdy, the pilot and designer of Canada's first airplane, the "Silver Dart" in 1909, was in attendance. He showed off photographs of his "rickety flying machine" before Symington made a speech describing the North Star as "especially conceived to enable Canada to take her place in trans-oceanic air travel."[314] McCurdy, who frequently appeared at nationalistic aviation events until his death in the 1960s, gave the North Star a sense of Canadian legitimacy, which was then parlayed into a legitimation of TCA's transatlantic service, but what did it mean for an airplane to be "especially conceived" for Canada?

Environmental Problems: Seasonality and Traffic

Despite all the North Star's introductory fanfare, Canadians just didn't seem to be interested. TCA was operating at a constant deficit in peacetime, which was met with varying degrees of alarm by executives, employees, government, and the public. English released a booklet-style annual report in 1946—the first year TCA's deficit hit seven figures—in which he reassured employees that "nearly everyone worked loyally and diligently and it can be said of TCA...that present financial difficulties are not attributable to the men and women who comprise

[313] Script, "NEWSROUNDUP," 8 April 1947, C. D. Howe fonds, MG-27 B20, vol. 94, LAC.
[314] "Baby, Businessmen and Diplomat Aboard New T.C.A. Ocean Liner," *Montreal Gazette*, April 16, 1947, 3. Before he died in 1961, McCurdy was trotted out at various points in Canadian aviation history to comment on its progress, including his first ride on a TCA jet in 1960.

it." English's overall tone was grim, however; the airline had "a pretty gloomy outlook" for the future, and even airmail, listed under the "Good Things of 1946" subheading, "was a disappointment and a worry."[315] This was generally framed as a problem of "balance." TCA, limited by the demands of its wartime service, could not expand quickly enough to meet the needs of individual passengers or the state. A report in *Between Ourselves* suggested that the war had left TCA with, "a permanently established appreciation for air transport (which we welcome) and a continuing inadequacy of means and techniques (which we are currently warring against and *overcoming*)."[316] Conditions did not improve with the introduction of the North Stars through 1947 and 1948. Deficits increased because of the expensive creation of TCA Atlantic and the costs associated with the North Star's inauguration and implementation, and politicians opposed to TCA and Crown corporations were watching the airline's every move. In short, the North Star was not the rousing symbolic success TCA wanted and needed it to be. As a result, Howe and new TCA President Gordon McGregor, who had taken over from Symington in early 1948, were constantly on the defensive. These concerns reached a head in 1949, a federal election year in which TCA's operational deficits topped out at $4,000,000 and perennial critic and federal Opposition leader George Drew was running for Prime Minister. The political debates surrounding TCA and the North Star will be dealt with in more detail in Chapter 3, but at the very least they triggered a self-evaluation at the airline. TCA needed the North Star and its expensive military-to-civilian technological systems to be a source of interest and pride in Canadian civilian aviation in general and TCA in particular.

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[315] Still, English points out that payroll comprised 40% of all TCA's expenses—a surprising editorial choice given his audience of mostly rank-and-file airline employees. W. F. English, "To the Employees of Trans Canada Air Lines, a Report on the Company in 1946," 1947, Air Canada Collection 005.003, CASM.
[316] "Our Courtship of 'Service,'" *Between Ourselves*, January 1947, 4.

Airline executives looking for an easy way to explain TCA's financial troubles eventually focused on the concept of *seasonality*. Canadians, it appeared, simply did not want to travel during the winter. TCA carried 65,000 passengers in the summer of 1948 and 45,000 in the off-season. McGregor suggested in his autobiography that "by any standards, a differential of 44% is a serious matter."[317] This differential was constructed in TCA public relations material, including what I call McGregor's "seasonality spin tour" of speeches at Rotary Clubs and the like through early 1950, as a problem that was embedded in the collective Canadian wintertime imagination, turning a financial problem into an environmental one. It made for an ideal scapegoat for airline officials, as it was easy for taxpayers to understand, easy to combat using education and advertising, and fit into already-established paradigms of Canadian climatic identity. TCA's public-facing material suggested that the fear of wintertime flying, which caused especially large imbalances in seasonal traffic in Canada, was both very real and an implicit imagined consequence of the unique Canadian relationship with winter. The North Star, with its evocative name, all-weather technologies, and nationalistic pedigree, became the star player in the shift from isolating *distance* as the primary obstacle to Canadian mobility to isolating *time*. In so doing, Canadian winters became a casualty of the new elasticity of time and space that was emerging as part of the modern Canadian envirotechnical nation.

Turning winter into an obstacle for TCA to overcome in its public-facing material was something of a subversion, deliberate or not, of the place seasonality has held in the history of Canadian mobility. Historian Merle Massie has recently shown how seasonal use patterns of northern Saskatchewan trails shifted with the introduction of wilderness tourism. Frozen muskegs and the "wide-open highways on frozen lakes" often allowed for easier movement of

[317] McGregor, *The Adolescence of an Airline*, 8.

freight in winter, but tourists were more interested in reaching northern recreational areas in the summer when those same trails ranged from simply uncomfortable to completely treacherous.[318] This inspired the provincial government to undertake a number of road-building initiatives in the first third of the twentieth century to increase uses of the trails in both seasons, but those roads, with their "scenic but useless curves and hauls up and down hills," were impractical for freighting.[319] Although the reasons for being mobile varied, with tourism in the summer and freight in the winter, Massie still shows that, as Canadian meteorologist and raconteur F. Kenneth Hare has claimed, Canadian "winter was (and still is) the season of mobility."[320] Canadians should be wholly confident in their ability to travel in the winter; moving around by toboggan, snowshoe, sledge, dogsled and, eventually, snowmobile are recognizable parts of the national winter imaginary.

I argue, however, that the postwar "travel boom" represents something of a fulcrum between the triumphalist national narratives of overcoming winter by travelling through it and the more symbolic winter narratives, where the technologies of modernity made place and season increasingly irrelevant, or at least easier to ignore. These two sorts of seasonality—one embracing everyday winter experiences, the other reducing them to symbol and performance—converge in TCA's concern with seasonal imbalances in passenger traffic.[321] According to airline

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[318] Merle Massie, "Seasonality and Mobility in Northern Saskatchewan, 1890-1950" in *Moving Natures*, edited by Bradley et. al., 107. The wide-open ice highway is also reminiscent of Canada's first flight mythology, which required an open space to allow clear take-off and landing.

[319] Massie, "Seasonality and Mobility," 119.

[320] F. Kenneth Hare, "Canada: The Land," *Daedalus* 117:4 (1988): 36.

[321] Of course, these two sorts of winter imaginary are not mutually exclusive. One only has to glance at nineteenth century reports of Canadian winter sport to see that symbol and performance were a vital part of early Canadian winter nationalism. Still, there is no doubt that the distance twentieth-century technological systems placed between everyday Canadians and the experiences of winter hastened and exaggerated this shift.

and advertising officials, winter mattered to Canadians, but in all the wrong ways. It was their special duty as Canada's national airline to help Canadians re-shape how they imagined wintertime travel and subsequently their relationship to the seasons, and indeed, to time itself.

Airline seasonality was not unique to TCA, nor was generalized travel anxiety particularly Canadian. As David Courtwright has argued for the United States, fear of flying, especially before the age of pressurized cabins, was quite common and most travelers were "perfectly satisfied to remain on the ground."[322] According to historian Rick Popp, immediate postwar air travel was one of the only instances where American advertisers' goals were "to allay fears, rather than amplify them."[323] Mid-century American advertisers used popular psychoanalytic theory to diagnose flight-phobics, tying that fear to childhood trauma, the Freudian Oedipus Complex—"flying was the unmitigated pleasure associated with assuming godlike powers"—and emotional transference and displacement.[324] Regardless of *how* the fear was analyzed, airlines and their associated advertising bodies believed that, as *Advertising Age* magazine put it in 1948, "fear of air travel is fundamental."[325] TCA's first Canadian advertising agency, for instance, Vickers & Benson, Ltd., told the airline's public relations department in early 1947 that there was "a nervousness that has been set up in the minds of the public" and that "any advertising plan" for the airline must "offset to the highest degree possible the nervousness now existing."[326] For both actors and analysts, fear of flying, regardless of the cause, was a key part of mid-century air travel.

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[322] Courtwright, "The Routine Stuff," 215.
[323] Popp, "Commercial Pacification," 62.
[324] Popp, "Commercial Pacification," 71.
[325] Popp, "Commercial Pacification," 65.
[326] Report by Vickers & Benson, "Recommendations for Trans-Canada Air Lines Advertising in Canada, 1947," February 1947, Office of the President papers, Air Canada fonds, RG-70, volume 11, LAC.

Clearly, fear of flying was not a particularly Canadian problem, but seasonality as a Canadian airline concern was also not conjured out of thin air in 1949 to appease TCA's political opponents. As early as 1946—during that first alarming seven-figure deficit year—McGregor, then Traffic Manager, suggested that the airline's financial struggles were due in part to seasonal patterns, claiming "airlines, and *perhaps particularly T.C.A.*, are earning the reputation...of being particularly prone to delays and cancellations" during the fall and winter.[327] However, by 1949, nervousness triggered by wintertime flying became somewhat of a specific scapegoat for TCA officials under intense scrutiny from the public and political opponents. As Marionne Cronin argues in her work on interwar bush flying, even technologies that appear to triumph over geography are "profoundly conditioned by geography."[328] In the case of TCA's perceived seasonality problem, a similar argument holds, but for climate instead of physical geography. Finding a "solution" to this problem, according to McGregor, was "of more importance to TCA than most" because the "fluctuations" between the seasons appeared to be much greater in Canada.[329] Canadians seemed comfortable with the North Star erasing distance, or flying over a picturesque Canadian landscape, but struggled with overcoming their climatic conditioning.

McGregor was dispatched as the spokesperson for this perspective. He made a number of public speeches and interviews through his first eighteen months as TCA President, often repeating that Canadians and aviation, more than any other nation or method of transportation,

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[327] Emphasis added. Report by Gordon R. McGregor, "Decline in Volume of Passenger Traffic," 7 December 1946, Office of the President papers, Air Canada fonds, RG-70, volume 5, LAC.
[328] Cronin, "Flying the Northern Frontier," 18.
[329] Address by Gordon McGregor to the Canadian Industrial Traffic League, 14 February 1950, Gordon R. McGregor fonds, MG-30-E283, volume 13, LAC.

suffered from a seasonal drop in passenger traffic.[330] In one 1950 speech, he asked "why...has the airline operated at an increasing deficit during the last four years[?]...Canadians, both taxpayers and such few others as there may be, have every right to ask those questions, and to have them answered."[331] His answers in these addresses highlighted the usual suspects, such as the creation of the Atlantic branch of service and the purchase of new aircraft, but the *first* factor he discussed was almost always seasonality, blaming a "widely-held opinion that if it is snowing outside, it is no day for flying, [and] that airline performance is more irregular in the winter than in the summer." These opinions, which he also called "beliefs," were "100% wrong" thanks to the North Star's new technologies such as pressurization, radio communications, and weather equipment.[332] On one of McGregor's script copies from late March 1950, the words "seasonal fluctuation," "out of date beliefs" and "pressurized cabin" were typed in all-capitals and underlined in red in the margins; these were clear and necessary talking points in explaining the current state of Canada's national airline to the press and public.[333]

In these addresses, McGregor envisioned a two-pronged attack on the "evil economic effects of seasonal fluctuations...[F]irst, everything possible must be done to eliminate the primary cause of the disease, and secondly, remedies must be applied to reduce the financial pain where the illness persists."[334] The first "medical" intervention—insofar as the "primary cause"

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[330] See, for instance, Address by Gordon McGregor to the Canadian Railway Club, 13 February 1950, Gordon R. McGregor fonds, MG-30-E283, volume 13, Library and Archives Canada, Ottawa.
[331] Address by Gordon McGregor to the Canadian Club, 27 March 1950, Gordon R. McGregor fonds, MG-30-E283, volume 13, LAC.
[332] Address by Gordon McGregor to the Canadian Industrial Traffic League, 14 February 1950, Gordon R. McGregor fonds, MG-30-E283, volume 13, LAC.
[333] Address by Gordon McGregor to the Canadian Club, 27 March 1950, Gordon R. McGregor fonds, MG-30-E283, volume 13, LAC.
[334] Address by Gordon McGregor to the Canadian Club, 27 March 1950, Gordon R. McGregor fonds, MG-30-E283, volume 13, LAC.

was a fear of wintertime flying—will be addressed in this chapter and the second will be addressed in Chapter 4. Canadian wintertime conditions, as Edward Jones-Imhotep has shown for the Arctic and upper ionosphere, were undergoing a discursive "transformation from natural order to hostile environment;" nature worked against technological order and reliability from TCA's perspective by making its passengers afraid.[335] Technologically speaking, any *reason* to be wary of wintertime travel had already been eliminated thanks to wartime diffusion technologies and enhanced airline infrastructure. The larger issue was convincing Canadians that the winters they had been conditioned to see as so treacherous as to be identity-forming could be made harmless by way of Canadian-built communications technologies, taming a "hostile nature" back into a "natural order." There were therefore two related barriers facing TCA in its fight against seasonality: getting Canadians to disregard their climatic myths and travel during the winter, and getting Canadians to disregard their climatic myths and travel *by air* during the winter. These were distinct from one another, and they were both part of TCA's implicit goal of reshaping the Canadian relationship to the seasons to suit its envirotechnical narratives.

A Brief History of TCA's Advertising Department

Advertising and promotions were the keys to overcoming these obstacles, and increased focus on public relations in this vein was characteristic of McGregor's tenure as TCA president. The first few years of his presidential term saw a dramatic restructuring of the airline, and, inspired by his previous position as Traffic Manager, McGregor was especially concerned with sales and traffic. In 1946, he pressed English and Symington for a renewed public relations focus, since Canadians exposed to the message of "greater capacity, greater speed, greater

[335] Jones-Imhotep, *The Unreliable Nation*, 96.

comfort, and greater flight frequency" in ubiquitous American air travel advertising could not "see corresponding remedial action being taken by TCA."[336] After consulting with the Public Relations and Advertising departments of the Canadian National Railway (of which TCA was still a subsidiary), English suggested that "we sadly need someone to tell our story not through...paid advertising or news releases accompanied by pictures of pretty girls, but by word of mouth" to trade organizations, "Business Men's Clubs," and the like. English suggested hiring someone to do this exclusively for TCA who could "sit at the feet of Gamaliel" and absorb as much as possible from his counterparts at the CNR.[337]

Although both McGregor and English saw the desirability of expanding TCA's publicity capabilities, English's enthusiasm, as well as that of the Public Relations department at the CNR was tempered for two reasons. First, there was not yet a clear picture of TCA's postwar fleet. Although the modified DC-4 began test flying in June of that year, how many TCA would receive, the routes on which they would be used, and whether or not the first batch would be pressurized was still up in the air. TCA needed something to sell in its advertising and vague promises that "the present unprecedented increase in demand for air travel did not come as a surprise...and that plans were drawn to provide for it" would not cut it.[338] The form and function of TCA's internal postwar public relations would hinge on the success of the DC-4Ms. English wanted to wait at least until all of the flight and safety tests had been completed before revealing to the public how hard TCA had been working, and even in early 1947 TCA's employee

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[336] Report by Gordon R. McGregor, "Publicity," 4 July 1946, 13 January 1947, Office of the President papers, Air Canada fonds, RG-70, volume 5, LAC.
[337] I don't know what this Biblical metaphor is. Report by W. F. English, "Financial Outlook and Company Organization," 12 November 1946, 13, Office of the President papers, Air Canada fonds, RG-70, volume 9, LAC.
[338] Report by Gordon R. McGregor, "Publicity," 4 July 1946, Office of the President papers, Air Canada fonds, RG-70, volume 5, LAC.

newsletter said that the airline would "wait until the North Stars get busy" before releasing "penetrating advertisements."[339] Second, there was some concern about TCA's (and the CNR's) relationship to the government. The CNR's publicity department was under the impression that sustained "pretty girls"-style advertising required some sort of special dispensation from Howe. This reflected mid-century concerns with the connections between advertising, with all of its "pretty girls," hucksterism, and manipulation, and the government. Although historian Reginald Whitaker has argued that mid-century political advertising was part of a larger "mass socialization" of Canadian politics, he points out that "old-fashioned politicians" were generally worried about political opinion being steered by "slick" advertising agencies.[340]

When McGregor became TCA president in 1948, advertising (featuring plenty of pictures of "pretty girls") became more of a priority, and TCA's first independent Advertising department, working separately from the airline's Public Relations department and the CNR, began operations in early 1949. This was partially because of McGregor's prior interest in traffic and publicity, partially because the North Star fleet was no longer the conjecture it had been in the previous half-decade, and partially because TCA began engaging the firm of Cockfield, Brown & Company. Founded in Montreal in 1928 by prominent advertising executives Henry R. Cockfield and G. Warren Brown, the firm was one of the first in Canada to make use of emerging research practices, conducting market surveys through the early 1930s for Campbell's Soup, Molson's brewing company, and even the federal Department of Fisheries.[341] It was easily

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[339] "Our Courtship of 'Service,'" *Between Ourselves*, January 1947, 4.
[340] Reginald Whitaker, *The Government Party: Organizing and Financing the Liberal Party of Canada, 1930-58* (Toronto: University of Toronto Press, 1977), 218, 236. See 216-263 for his analysis of the Liberal Party and its advertisers.
[341] Daniel J. Robinson, *Selling Themselves: The Emergence of Canadian Advertising* (Toronto: University of Toronto Press, 2001), 223. For more on Cockfield, Brown & Company, see also

the largest advertising firm in the country, and by some accounts was the largest agency per capita in the world by the late 1950s, for the most part because of its government contracts.[342] By the time TCA began working with it in the late 1940s, the agency had already begun its longstanding relationship with the Liberal Party of Canada. Because of its size, Cockfield, Brown was not dependent on the party's fortunes, and therefore its work with the Liberal Party and its Crown corporations were what Whitaker called a "profitable dollop" of "icing" on the "largest advertising cake in the country."[343]

The official relationship between Cockfield, Brown and the Liberal Party of Canada remains rather secretive, which is standard for party-advertiser interactions. As historian Jonathan Rose has suggested, analysts know which agencies were popular with which parties, but little information regarding details is available.[344] This is especially the case with Cockfield, Brown because a number of the agency's records were lost when it became insolvent in the early 1980s.[345] Regardless, Cockfield, Brown emerged in the late 1940s as a power player in Canadian government advertising, engineering Louis St. Laurent's memorable and enormously successful turn as the affable, non-threatening "Uncle Louis" in the 1949 and 1953 federal elections. More importantly for TCA, the agency had also started working with Crown corporations. Unlike the Liberal Party or other Crown corporations such as the CNR, TCA used Cockfield, Brown as its

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Daniel J. Robinson, "Cockfield, Brown & Company" in *The Advertising Age Encyclopedia of Advertising* (Chicago: Fitzroy Dearborn Publishers, 2002), 341-343.

[342] Whitaker, *The Government Party*, 225.

[343] Whitaker, *The Government Party*, 255.

[344] Jonathan Rose, *Making "Pictures in Our Heads": Government Advertising in Canada* (Westport: Praeger, 2000), 90-91. Whitaker argues that this was because it was a patronage relationship: party work in exchange for lucrative contracts. Whitaker, *The Government Party*, 228-231.

[345] Daniel J. Robinson, *The Measure of Democracy: Polling, Market Research, and Public Life, 1930-1945* (Toronto: University of Toronto Press, 1999), 23.

only advertising agency for the Canadian market from the creation of its Advertising department to the defeat of the Liberal Party in the 1957 federal election.[346] Rose has suggested elsewhere that unlike the United States, Canadian government advertising was used through the twentieth century to create and bolster national myths and symbols, especially "the values of what it means to be Canadian": unity across geographic space, federalism, and belonging.[347] Due to its monopoly status and enrolment of state advertisers, TCA's campaigns made liberal use of those ideas and symbols. It was spared the urgency of competing with other airlines, as was the case in the United States, and could instead concentrate on articulating abstract ideas of nation, technology, and the environment as a part of building its customer base.

TCA's new Advertising department was founded with a specific and pointed goal: getting Canadians flying during the winter. Since "one of Advertising's biggest concerns is the 'ironing out' of" seasonality, Director of Advertising D. C. Bythell wrote in *Between Ourselves*, the majority of the new department's funding was allocated to the winter months to combat:

> "the impression held by great masses of the general public that flying in the winter time is not so dependable as it is during the balmy summer months...The last few years, however, have seen such advances in all-weather operating that on-time performance of schedules has vastly improved and today, airline flying from an operational standpoint varies little between seasons. But the general public still take a quick look at the wintry blasts before flying. Consequently, TCA Advertising has as one of its major tasks the selling of the idea that 'anytime is flying time.'"[348]

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[346] TCA still gave Cockfield, Brown lots of business in the 1960s, but it also worked with other agencies and, in fact, was the only government body to continue to associate with Cockfield, Brown. Whitaker, *The Government Party*, 260-261.
[347] Jonathan Rose, "Government advertising and the creation of national myths: The Canadian case," *International Journal of Nonprofit and Voluntary Sector Marketing* 8:2 (2003): 154.
[348] D. C. Bythell, "30,000,000 'Fly TCA's,'" *Between Ourselves* December 1949, p. 5-6

As the airline's newest and most advanced equipment, the North Star was at the forefront of these efforts. The problem of seasonality created an envirotechnical knot that TCA attempted to untangle using advertising and passenger education on the one hand, and introduction of the North Star as a vehicle for modern Canadian-ness on the other. The result was a multifaceted set of campaigns that worked to sell Canadians on the idea that "anytime" was flying time.

"Anytime is Flying Time": Air Travel and the Mundane

"Anytime," here operates on two different, but related, levels. First, as I will discuss in more detail below, the "anytime" was in reference to Canadian seasonality: anytime meant *wintertime*. Second, making anytime flying time carried the implicit suggestion that flying could be a regular, routine transportation choice for everyday Canadians. Aviation professionals—pilots, airline executives, and the like—and sympathetic politicians such as Howe had been working to remove the romanticized status assigned to flying for decades. "For commercial flying to become commonplace," aviation historian David Courtwright argues, "it had to become safe, predictable, uneventful—dull."[349] This is an echo of McGregor's claim in 1950 that:

> "We work and hope for the time when we shall be regarded as an ordinary every-day means of public transport, without any romantic overtones whatsoever. We look with mild dismay upon the traveller who persists in regarding a flight as something of an adventure. We want the aircraft to seem a natural, normal and thoroughly sensible means of transport to everyone."[350]

[349] Courtwright, "The Routine Stuff," 219. For another brief discussion of airline advertising in this period, see Van Riper, *Imagining Flight*, 88-90.
[350] Address by Gordon McGregor to the Canadian Railway Club, 13 February 1950, Gordon R. McGregor fonds, MG-30-E283, volume 13, Library and Archives Canada, Ottawa.

TCA's attempts to make flying seem "thoroughly sensible" followed the set of common advertising tactics, highlighted by Courtwright, used by mid-century American airlines to calm fears of flying: emphasizing the experience of airlines and individual pilots, appealing to women and children, and outlining new technological developments.[351] It was common in the late 1940s and early 1950s to profile pilots and crewmembers with wartime experience in promotional material. Even McGregor's wartime and pre-war experience—he had thrice won the Webster Trophy for best amateur pilot in Canada and commanded one of the highest-scoring fighter wing squadrons after fighting in the Battle of Britain—became a talking point in interviews and profiles of himself and TCA.[352]

The Canadian context had the added angle of what one 1949 profile-style advertisement called "Canada's northland flying."[353] Bush flying remained a useful touchstone in these types of advertisements because TCA could extend the cold-weather wintertime mobility attributed to heroic, adventurous bush pilots to its crew and aircraft. As one winter 1950-1951 brochure pointed out, "TCA pilots are, *as you might expect,* among the most experienced winter fliers in the world."[354] The phrase "among the most experienced winter fliers" appeared quite frequently

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[351] Courtwright, "The Routine Stuff," 219.

[352] See, for instance, Script, "Canadian Cavalcade," 26 April 1949, Gordon R. McGregor Fonds, MG30-E283, vol. 13, LAC. Upon being reminded by McGregor that he had done "quite a bit of amateur flying in Canada before the war," interviewer Cy Mack managed to shoehorn in that he "had already won the Webster Trophy three times—but even as one of Churchill's historic 'few' to whom the world owes so much, you were pretty mature [at age 38] to shoot down five enemy aircraft, share another, probably destroy even more, and damage eight...And you had to hold the fort again a few years later, when you led a Canadian fighter force up into the ice and fog of the Aleutians, to defend all North America against the Japs until...you commanded the 126 Spitfire Wing, which ended the war as the highest scoring fighter wing on the continent. But to get back to peacetime flying..."

[353] Advertisement, "The Men 'Up Front,'" 1949, Air Canada Collection, CASM.

[354] Emphasis added. Brochure, "For Business and Pleasure, Fly above the Weather," January 1951, Air Canada Collection, CASM.

through the early 1950s. One 1951 newspaper advertisement, for example, highlighted TCA's meteorological, flight dispatch, *and* piloting expertise: "because of these men, any time is good flying time for you."[355] The legacy of bush flying in Canada, despite its romanticization, provided the airline and its passengers with a source of confidence and a subtly Canadian bent to coverage of Canada's newest transport.

These strategies converged in a series of TCA educational films, each highlighting a different aspect of airline operations; "A Great Day For Flying," for instance, featured "the fascinating ingenuity of LORAN" and how the Meteorological Service relayed up-to-the-minute weather information to pilots.[356] Bythell was most excited about 1949's pilot-themed "Mr. Barnaby Sleeps in the Sky," starring "outstanding" New York television actor Vaughn Taylor, later known for his turns on *The Twilight Zone*. The purpose of this film, according to Bythell, was to show why TCA pilots "are the best skilled men in the air—and thus indirectly inspire confidence in TCA and flying generally."[357] The titular Mr. Barnaby, a "timid soul" who has never flown, has nightmares and hallucinations about his first flight, one of which features the conveniently-named "Edmonton Flyers" hockey team. Once he boards the North Star, he imagines that the crew are "Edmonton Flyers" players—a curious, but not entirely out-of-place, blending of Canadian winter sports and air travel.[358] However, once he meets them, and they

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[355] Advertisement, "TCA is Weather-Wise All-Year-Round," November 1951, Air Canada Collection CASM.
[356] Precis, "A Great Day for Flying," 1949, Air Canada Collection, CASM.
[357] Memorandum by D. C. Bythell, "TCA Film—'Mr. Barnaby Sleeps in the Sky,'" 28 December 1949, Air Canada Collection, CASM.
[358] The Edmonton Flyers were a real team, playing in the relatively small Western Canada Senior Hockey League. Aviation and hockey were actually quite culturally linked in the late 1940s; the RCAF Flyers, an Ottawa-based hockey team made up of active and former Royal Canadian Air Force personnel, had won the gold medal at the 1948 Olympic games. Upon their return to Canada in April 1948, no less than the Minister of National Defence, Brooke Claxton, stated in the House of Commons that "the Royal Canadian Air Force team has re-established [in

"reassure him and explain the operation of the aircraft," he is able to relax and sleep through his flight.[359] This film, and the others in the series, were screened by TCA offices in major cities and were also available to "women's organizations, service and businessmen's clubs, special interest groups, youth organizations, church and educational groups, etc." for private showings.[360]

It is worth noting that "women's groups" was first on the list. As Courtwright has suggested above, targeting women and children—especially women—was an advertising strategy designed to make flying seem safe and mundane. As I have argued elsewhere, TCA officials assigned a great deal of travel-decision-making agency to female travelers, since, as Bythell suggested in a 1949 memo, "it is recognized that they play a major role in deciding where the family travels on holiday."[361] According to American advertising historian Daniel Delis Hill, targeting women consumers through advertising already had been recognized as an ideal way to isolate and control family spending by the turn of the century. By the time advertising was incorporating market research and demographic sciences in the 1920s, "the paean of advertisers was unquestionably that of woman and her preeminence as consumer."[362] Although Hill focuses entirely on advertising consumer goods, TCA used a similar set of strategies when selling airline service and travel experiences to what they later called the "women's market." The first strategy to appeal to women in the late 1940s and early 1950s was

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peacetime] Canada's proper supremacy in her native sport." Canada, *House of Commons Debates*, April 7, 1948 (Brooke Claxton), http://parl.canadiana.ca/view/oop.debates_HOC2004_03/627?r=0&s=1.

[359] Precis, "Mr. Barnaby Sleeps in the Sky," 1949, Air Canada Collection, CASM.

[360] Note that "women's organizations" were listed first. Memorandum by D. C. Bythell, "TCA Film—'Mr. Barnaby Sleeps in the Sky,'" 28 December 1949, Air Canada Collection, CASM.

[361] Memorandum by D. C. Bythell, "Newspaper Advertising—Bermuda/Caribbean," 20 October 1949, Air Canada Collection, CASM. See also Blair Stein, "When A Husband Travels: Women and the Changing Nature of Air Travel, 1949-1969," MA Cognate, Queen's University, 2011.

[362] Daniel Delis Hill, *Advertising to the American Woman 1900-1999* (Columbus: Ohio State University Press, 2002), 11.

creating promotional material that large numbers of women would *see*. Advertisements were taken out in bridal magazines, special pamphlets were made detailing how to travel with young children, and information about TCA appeared in what today would be called "advertorials" on women's newspaper pages, such as "Buys and Whys with Barbara Brent."[363] The second, and very much related, tactic was creating promotional copy that women would *respond to*. Women were pictured as the decision-makers; one popular set of 1949 advertisements depicted a young woman looking knowingly towards the reader and exclaiming, "I sold him on Bermuda!" while her husband smokes a pipe in the background. This advertisement, and the others in the campaign with taglines such as "Bermuda here we come!" and "This is us this winter," implied in the copy that the wife was the traveler responsible for gathering information and presenting it to her family.[364]

Children, especially girls, showed up quite frequently in early TCA promotions as well. Hill refers to these sorts of advertisements as "Little Homemaker" and "Little Mother" campaigns designed to "lead both mothers and daughters to brand awareness, product loyalty, and, ultimately mass-market consumption."[365] Two out of six advertisements in TCA's first "case history" campaign, providing descriptive "ordinary people" testimonials to "interest a

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[363] "Buys and Whys" was apparently very popular. Bythell wrote that it had "exceptionally high readership by women," and it appeared in 62 weekly newspapers over a period of three months. Memorandum by D. C. Bythell, "New Advertising Campaign—'Buys and Whys'," 22 January 1950, Air Canada Collection, CASM.

[364] This series appeared over the winter of 1949-1950 in over a dozen daily newspapers in both English and French and will be discussed in more detail in Chapter 4. Memorandum by D. C. Bythell, "Newspaper Advertising—Bermuda/Caribbean," 20 October 1949, Air Canada Collection, CASM.

[365] Hill, *Advertising to the American Woman*, 211. Vance also points out that children were used by the "air lobby" to convince Canadians of the safety and commonplace-ness of air travel. Vance, *High Flight*, 129-132.

broad mass of public," featured girls (and another two featured older women).[366] In the most striking, three-year-old Marilyn Lee Robinson of Lethbridge, Alberta is pictured clutching a doll while deplaning in Britain, where she is to meet her grandparents for the first time. Not only did these advertising strategies work to appeal to women consumers, but appealing to women consumers was a tactic in and of itself to make flying appear mundane, safe, and reliable. Historian Deborah Douglas has suggested, for instance, that hiring the first female flight attendants, known as *air hostesses* or *stewardesses*, by Boeing in 1930 was "the first formal attempt to use women to 'sell aviation.'" American airlines that embraced the air hostess early were under the impression that putting women on airplanes and in images of airplanes "would provide psychological reassurance through the image of safety and caution."[367] Showing flight attendants, like female travelers and young girls, in TCA promotions evoked the "ploy of an earlier generation of women pilots—'If I can fly, certainly you, a man, ought to be able to.'"[368]

These strategies to make anytime seem like flying time, such as appealing to women and emphasizing the experience of pilots and crew, were relatively common across North American airlines and were an easy way to make air travel seem mundane. At TCA, however, there was an added emphasis on weather, climate, and the specific technological systems used to transcend them in order to create new seasonal patterns of mobility. TCA made "anytime" into "flying time" by advertising the all-weather flying suite of technologies and the North Star on which they were featured. This was one of the airline's major concerns in creating and distributing

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[366] Memorandum by D. C. Bythell, "Trans-Atlantic Advertising General Magazines and Newspapers," 18 May 1949, Air Canada Collection, CASM.
[367] Deborah G. Douglas, *American Women and Flight Since 1940* (Lexington: University Press of Kentucky, 2015), 9, 33.
[368] TCA never used the popular term *hostess*, opting for *stewardess* when they began hiring female flight attendants in 1938. Douglas, *American Women and Flight*, 25. See also Popp, "Commercial Pacification," 67-70.

advertising campaigns and promotional materials both specific to the North Star and more generally. As suggested above, the bulk of the Advertising department's attention and capital was devoted to the off-season, but so was the advertising *copy*. "Winter" as an analytic category appeared non-stop in early promotional material, whether it was explaining how the North Star operated during the winter, portraying wintertime scenes, or even juxtaposing Canadian winters with the "sun destinations" travelers could visit during the off-season. In this type of material, TCA used a rather specific set of strategies in its public-facing material to make *winter*time into flying time. These promotional materials grappled with emerging difficulties in carrying earlier envirotechnical imaginaries into the postwar period; the popular narratives of triumph over distance and season begin to give way to a creeping ambivalence towards the place Canadian winters and Canadian climates held in the pantheon of national symbols. In so doing, TCA's "all-weather" advertising material both supported and subverted pre-existing patterns of Canadian seasonal mobility by legitimizing them while at the same time suggesting they be replaced with a new modern relationship to time.

Wintertime is Flying Time

The earliest all-weather advertisements featuring the North Star could not afford to be implicit with their seasonality rhetoric. The Advertising department was founded on the very idea of evening out seasonal fluctuations, as seasonality was being presented as the guilty party in TCA's financial struggles. The airline's first major all-weather flying campaign is an excellent case study of the tactics that TCA's, with the help of Cockfield, Brown, used to build what Rick Popp has called "a shared symbolic vocabulary" of seasons, technologies, and Canadian-ness.[369] The advertisement (Figure 5) featured a group of children tobogganing down a snow-covered hill while gesturing towards a passing North Star and exclaiming, "There's the *real* way to get around in winter!"[370] The small-print copy trumpeted that TCA had carried over a million passengers "in *wintertime*," which proved that "flying is a year-round operation."[371] Flying could only become year-round due to higher operational ceilings, meaning that TCA could go "over the weather" because



Figure 5: "The real way to get around in winter," 1949.

[369] Popp, "Commercial Pacification," 63.
[370] Advertisement, "TCA Tops the Weather," 1949, Air Canada Collection, CASM. Emphasis original. A color version appeared in magazines starting in early 1950.
[371] Emphasis original.

"pressurized cabins (in TCA's famous 'North Star' Skyliners) offset altitude."[372] Bythell saw this advertisement as a smashing success. It was one of the few specific campaigns profiled in the 1949 *Between Ourselves* article introducing the Advertising department. It appeared in several versions in at least a dozen newspapers, as a direct-mail flyer with a circulation of over 100,000, and as a two-color magazine advertisement in 1950. More importantly, Bythell described it as key in the fight against seasonality since it was "designed to help dispel the widely held belief that winter flying is more hazardous, less reliable than travel at other seasons."[373] He repeated the same phrasings in his *Advertising News* memoranda throughout 1949 and 1950: "widely held belief," "less reliable," "more hazardous." Not only would the copy featured in this toboggan series be repeated in all-weather flying advertisements for the following few years, but so would the Advertising department's rationale for developing and printing them.

There are two striking features of this advertisement that were not commonly used in all-weather flying campaigns. The first is the use of children. Although children were used as symbols of safety and mundanity in airline advertising, I have not found another targeted all-weather flying campaign at TCA that features them.[374] Perhaps this was because the technological systems responsible for getting the North Star flying above the weather were considered too complex for children to understand; later advertisements, such as the "why doesn't somebody *do* something" series discussed below, featured adults very much in-the-know about how and why the North Star was ideal for all-season travel. Perhaps also the childlike

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[372] Advertisement, "There's the Real Way to Get Around in Winter," 1949, Air Canada Collection, CASM.
[373] Memorandum by D. C. Bythell, "Direct Mail—Winter Flying/Family Fares," 19 December 1949, Air Canada Collection, CASM.
[374] As mentioned above, they did appear in "case history" and other sorts of system advertisements.

wonder these children expressed towards the North Star was to be echoed by potential travelers; this is also reflected in early 1960s advertisements that pictured children staring at "TCA's giant jets."[375] Regardless, the chaos of the children playing—the speed of the toboggan, their hair flying in the wind—mirrors the shapes prominent in the advertising copy. The main copy is designed to look like a torn piece of paper, the tagline is curved across the top of the page, and the trajectory of the North Star, toboggan, and main copy creates a dynamic "s" shape. The overall effect is one of freedom of movement and youthful joy in speeding across the snowy wintertime landscape.

The toboggan itself is the other striking feature. It placed the North Star inside an already-popular timeline of travel technologies, such as those used for Atlantic crossings in early North Star and TCA decennial-era promotions, but with a distinctly Canadian angle: getting around *in winter*. TCA advertisements through the 1950s and 1960s used the juxtaposition of old and new technologies frequently, from picturing horse-drawn buggies in the Caribbean to using trains to evoke regularity in scheduling, but this is the only deployment of toboggans I could find. The toboggan also stands out in that it is an "old" technology used almost exclusively in winter and in Canada. Winter pastimes, especially tobogganing, became go-to symbols of Canadian-ness through the late nineteenth century and were useful ways for newly Confederated settlers to carve out an identity for themselves separate from Great Britain or the United States.[376] In his book on nineteenth-century Canadian winter visuals, art historian Edward Cavell

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[375] Advertisement, "Grandmummy!" December 1960, Air Canada Collection, CASM. The same photograph of Karen, the little girl, was reproduced in a 1961 print campaign selling summer travel to Europe. "Karen" and her "giant jets" are the subject of Chapter 5.

[376] Historian Gillian Poulter has written a great deal on nineteenth century wintertime sports and Canadian identity. See Poulter, *Becoming Native in a Foreign Land*; "Embodying Nation"; "Snowshoeing and Lacrosse: Canada's Nineteenth-Century 'National Games,'" in *Ethnicity,*

argues that all Canadian "leisure activities have evolved from necessities developed for winter survival," but tobogganing in particular gained traction with Euro-Canadians because it "was as fast as a person could go in the nineteenth century world."[377] Tobogganing clubs, involving men and women, were hugely popular in major southern Canadian cities such as Toronto and Montreal, and Governors General set up tobogganing courses on the grounds of their Rideau Hall residence in Ottawa through the late nineteenth and early twentieth century, even installing torches to allow nighttime sledding. Nineteenth century accounts of tobogganing parties often linger on how participants are dressed; one account from the early 1880s devotes an entire page to the "picturesque costumes, present[ing] a sight that the eye of an artist might delight to linger over."[378] Another account of winter sports, focusing on tobogganing and skiing, in *Canada* magazine in 1907, paraphrases Rudyard Kipling's limerick:

> "There was a young man of Quebec
> Who stood in snow up to his neck
> When they said, 'Are you friz?'
> He replied, 'Yes, I is,
> But we don't call this cold in Quebec."[379]

There is no mistaking the children in the 1949 TCA advertisement, with their varied snow-clothes, rosy cheeks, and joy at being outdoors in winter, for anything but Canadians. And there

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Sport, Identity: Struggles for Status, edited by J. A. Mangan and Andrew Ritchie (London: Routledge, 2004), 235-258.

[377] Edward Cavell and Dennis Reid, *When Winter Was King: The Image of Winter in nineteenth Century Canada* (Banff: Altitude Publishing, 1988), 20-22.

[378] J. E. Collins, *Canada Under the Administration of Lord Lorne* (Toronto: Hunter, Rose & Co., 1884), 313-314.

[379] "Christmas Pastimes in Canada: How a Delightful Season is Passed," *Canada: An Illustrated Weekly Journal for All Interested in the Dominion Vol VIII* (1907-1908): 354.

is no mistaking their toboggan as anything but that most Canadian of transports since, as one 1880s account suggested, "to the Canadian the toboggan is as familiar as a household word."[380]

This juxtaposition technique is even more extreme if tobogganing is seen, as Gillian Poulter has argued, as "an indigenous activity that had been tamed, organized, and made more scientific."[381] This gestures towards the interwar trend of displaying images of aircraft bringing modern conveniences, such as catalog shopping, to Indigenous peoples in Canada's North. These visuals, which took the forms of photographs, advertisements, and even airmail stamps, "frequently juxtaposed aircraft with older [Native] modes of transportation, like dogsleds."[382] In the case of the North Star and its new services, this technique moved beyond the visual; in a *Saturday Night* column, journalist Herbert McManus wrote that flying was at its easiest "today [because] swifter methods than dog sled are available to transport Canadians to [hub airports] Toronto or Montreal."[383] Indigenous technologies were used to represent primitiveness and backwardness, and were deliberately contrasted with aircraft. Not only was the toboggan an Indigenous technology, but it was also uniquely Canadian. This was more than a specific iteration of the general use of aviation to visually represent modernity, which historian Jonathan Vance traces back to the age of ballooning; the image of children tobogganing recalled both a colonial Euro-Canadian past and the future of travel as realized by the North Star.[384] The toboggan, and the children bundled up for outdoor play, was a stereotypical Canadian wintertime

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[380] George Monro Grant, *Picturesque Canada: The Country as it is and Was*, vol. 1 (Toronto: Belden Brothers, 1882), 190.
[381] Poulter, *Becoming Native in a Foreign Land*, 174.
[382] Vance, *High Fight*, 154.
[383] Herbert McManus, "Air Service Brings a Coral Playground," *Saturday Night*, May 29, 1949, 2. Indigenous transports were clearly seen as a "primitive" way to get around; one passenger complained in 1954 that "to get to the airport from Hamilton you need a dog sled and an Indian guide." "What Others Think of Us: It's Worth It," *Between Ourselves*, January 1954, 6.
[384] See Vance, *High Flight*, 29.

scene, and one that everyday Canadians might view with some level of comfort and even enjoyment. Despite all that, the North Star was the "real way to get around in winter," usurping even toboggans in speed, comfort, and reliability.

Not all of TCA's early all-weather campaigns were so explicit with their wintertime discourse. Starting after the toboggan campaign, TCA advertisements took great pains to show that weather in general, but especially winter, no longer mattered to air travel. Pressurized cabins allowed the North Star to fly "above the weather," and also provided a wider range of altitudes at which it could fly. Expanded meteorological forecasting, radio communication and instrumentation, and cooperation between "TCA and the Department of Transport have been able to take some of the sting out of Canadian weather," *Between Ourselves* argued in 1948.[385] Finally, climate control inside the cabin (and also inside airport terminals) meant that flying was beginning to feel the same, regardless of season. "Spring or fall, summer or winter," one 1951 brochure suggested, "TCA takes off on regular, convenient, round-the-clock schedules."[386] However, wintertime rhetoric and images were constantly evoked; winter might not appear to matter to the regular operations of aircraft, but winter still mattered to how everyday Canadians imagined themselves making leisure decisions, travelling, and understanding their relationships to technology and the environment. A series of 1950 advertisements featuring well-dressed couples claiming "we *like* flying all year 'round!" suggested that passengers "leave winter far below" in the "warm, club-like atmosphere of a TCA Skyliner." Winter was still the season to leave below, even though "your TCA Skyliner, specially developed for year 'round operation, is

[385] "Delays are Dynamite," *Between Ourselves*, May 1948, 5.
[386] Brochure, "For Business and Pleasure, Fly above the Weather," January 1951, Air Canada Collection, CASM.

every day setting new records for *on-time* performance."[387] Despite the overwhelming message that every season was for flying—the passengers pictured are not as bundled up as the children in the toboggan series—Bythell pointed out in an *Advertising News* memo that:

> "This campaign is timed to have its major effect just prior to and during the earlier winter months when weather conditions automatically seem to deter many people from travelling. It has long been felt that a part of our winter decline in traffic is attributable to the widely held belief that wintertime travel is less reliable, [and] more hazardous."[388]

Making apprehension toward winter travel the result of some often-repeated "widely held belief," a sort of national delusion, further nudged Canadian winters towards the imagined. Canadians needed to have some sort of attachment to winter for these advertisements to be effective, but winter also had to have no real consequences for flying.

Despite TCA's repeated claims that seasons were meaningless to air travel, they *did* matter to the day-to-day operation of the North Star, even though passengers might not have noticed. In the summer, North Stars had to be cooled; in 1949 TCA invested in several "aircraft coolers" to keep the interiors of aircraft that had been sitting on the Montreal or Toronto runways for hours feeling "as cool and refreshing as a lakeshore breeze in the evening."[389] And winter mattered too. Snow had to be removed from runways in what *Between Ourselves* called a "perennial problem—a costly pain in the neck."[390] A 1948 article detailed the process of "winterizing" North Stars by positing that "if you think it's cold waiting on a corner for a bus in the dead of a blustery Canadian winter's night, try floating around for a while at 20,000 feet."

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[387] Emphasis original. Advertisement, "We *Like* Flying All Year 'Round!" 1950, Air Canada Collection, CASM.
[388] Memorandum by D. C. Bythell, "Institutional Advertising—All-Weather Flying," 3 November 1950, Air Canada Collection, CASM.
[389] "Heat Beaters," *Between Ourselves*, September 1949, 3.
[390] "Perennial Problem," *Between Ourselves*, April 1949, 8.

The North Star's reaction to these undesirable conditions was anthropomorphized; the thought of extreme cold might make it tremble and "the oil in its circulatory system take on the substance of jelly." Once again, though, TCA's cold-weather expertise came to the rescue; the airline's engineers were so skilled that it would feel like "the North Stars are fitted with red flannels."[391] The airline also struggled with choosing flooring for the North Star that would not freeze, get slippery, or collect so much snow from passengers' shoes that it would create a tripping hazard.[392] These issues were generally hidden from the travelling public; it took a lot of work to





Figure 6: "All-weather flying" advertisements from 1950 (L) and 1951 (R)

[391] Temperature variations on the ground generally no longer matter at 20,000 feet. Articles like these equate the cold associated with altitude with the cold associated with latitude. "It's Cold At 20, 000," *Between Ourselves*, December 1948, 12, 31.
[392] According to the Supervisor of Ramp Service in 1951, solid rubber mats froze, coco-mats collected too much snow and tended to curl, and linoleum would peel and become too slippery. Memorandum by J. C. Sky, "Entrance Mats—Aircraft," 11 January 1951, Air Canada Fonds, RG-70, vol. 234, LAC.

erase the materiality of the seasons, even though the seasonal imaginary remained. As one 1949 seat-back brochure suggested:

> "The climatic extremes of the northern latitudes have long since begun their surrender to the aeronautical engineer. With anti-icing equipment, specialized heaters, and modern landing aids, the Skyliners are properly dressed for all weather. It is worth noting too, that the bleak winter landscape passes by a lot more quickly in a Skyliner."[393]

Once again, the North Star was anthropomorphized and assigned some winter clothing, but with a technological twist. In promotions such as these, winter had no effect on the properly equipped North Star, but the bleakness of winter landscapes had an effect on everyday passengers.

This is why, in advertisements like the "we *like* flying" series, it was increasingly common to use "weather" in place of "winter." In one late 1951 campaign, which ran in 40 newspapers in eight provinces, the tagline was that the easiest way to escape the weather was to "go over it, or go around it" using a pressurized North Star. In one advertisement in the series, a woman looks out the window and asks "why doesn't somebody *do* something about this weather?" while her male companion suggests going over or around (Figure 6). In the other, a professor, complete with stylized mortar-board hat and bow-tie, informs his class that "there are only two ways to avoid bad weather": go over or around. Advertising Manager Donald McLauchlin claimed that this campaign, despite its attempts at "selling the Canadian public on air travel all year round," used a "cheerful approach" and "cartoon technique" to "combat an all too frequent attitude on the part of the public that winter increases the hazards of air

[393] This was also something of a subversion of the aerial views rhetoric discussed in Chapter 1, as the landscape was no longer something to be enjoyed but instead something to pass over as quickly as possible. Booklet, "Horizons Unlimited," c. 1949, Air Canada Collection 005.003, CASM.

transportation."[394] What season the advertisements take place in was left ambiguous and the word "winter" only appeared once, but the bullet points highlighting the "smoothest routes," "constant comfort," "veteran pilots," and the like were stylized snowflakes.[395] Even when they were not explicitly about winter, advertisements such as these still needed to reference winter and the place it held in the Canadian envirotechnical consciousness.

Another set of strategies, operating parallel to the arguments that seasons no longer mattered to air travel, was to suggest that winter flying was actually *better* for the airplanes and crew than summer flying. The contradictions between the two were often mitigated by claims that although *passengers* might not feel the difference between winter and summer flying, pilots, who, as suggested above, knew a great deal about winter due to their northland experience, preferred winter flying. Subsequently, these advertisements generally featured airline personnel instead of children or everyday passengers in order to sell the idea that wintertime is *better* flying time. One 1950 advertisement, released with the "we *like* flying" campaign, shows a smiling captain and co-pilot, who "know that wintertime is *good* flying time—because aircraft operate at their best in winter's cold dense air." Of course, those pilots "possess an unsurpassed skill and experience in winter flying," so they certainly would know best.[396] Brochures released specifically to promote off-season travel and distributed through travel agencies, in seat-back pockets, and via direct mail repeated this claim, often with more technical explanations of how and why winter was better for flying. Every explanation was a variation on the theme that *TCA pilots* preferred flying in winter because "they find that in winter the air is smoother, radio

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[394] Memorandum by D. S. McLauchlin, "Institutional Advertising—All-Weather Flying," 26 November 1951, Air Canada Collection, CASM.
[395] Advertisement, "Why Doesn't Somebody Do Something About the Weather?" 1951, Air Canada Collection, CASM.
[396] Advertisement, "Anytime is Good Flying Time!" 1950, Air Canada Collection, CASM.

reception clearer, and that aircraft perform better."[397] Brochures such as these had circulations of over 10,000 and deliberately included, according to Bythell, "special copy...to point out the advantages of winter flying."[398] These advantages were financial—off-season fares were often reduced—but also clearly technological and cultural. TCA pilots knew winter better than any others, *and* their airplanes performed more efficiently in winter.



Figure 7: "Snowbound or Skybound?" 1950.

As a popular 1950 advertisement with the tagline "Snowbound or Skybound?" put it, "flying conditions are *good* in the cold, dense air of wintertime." The matter-of-fact statement that flying in the winter is *good*, and not simply tolerable— just like "we *like* flying all year 'round," instead of just "we tolerate it"—is yet another example of using Canada's apparently special winters to somehow make them less special (Figure 7). The "Snowbound or Skybound"

[397] Brochure, "For Business and Pleasure, Fly above the Weather," January 1951, Air Canada Collection, CASM. See also "To Britain and the Continent: Winter Excursion Fares," November 1949, Air Canada Collection, CASM.
Memorandum by D. C. Bythell, "Advertising—Winter Flying Folder—ADV. 51124," 28 December 1950, Air Canada Collection, CASM.
[398] Memorandum by D. C. Bythell, "Folder: 'To Britain and the Continent,'" 21 November 1949, Air Canada Collection, CASM.

campaign was designed to supplement the toboggan series, which had just started its color-print run, and also contrasted old and new. In this case, though, no people are present; instead, a sleek North Star soars above a pastoral road blanketed in fresh snow, which does not even appear to be paved. The 14 newspapers slated to run this advertisement in early 1950 were circulated through Canada's largest urban centers and would be home to few landscapes like the one pictured.[399] Instead, the image depicted how Canadians imagined winter might look; rather than juxtaposing old and new technologies, "Snowbound or Skybound" compares an imagined, symbolic Canadian winter with one that has been transcended using technological systems made to seem especially Canadian. This particular advertisement is also chock-full of numbers: TCA carried over 690,000 passengers in 1949, flew over 84,000,000 air-ton miles, a North American airline has a take-off or landing every eight seconds, and most TCA flights are completed within 30 minutes of schedule. According to Bythell, this was a method by which the advertisement "attacks the problem [of seasonality] directly, endeavouring to make clear the great improvements made in on-time performance and to bolster this with facts."[400] The language here—"beliefs," as they were so often called, could be countered with "facts"—speaks directly to TCA's attempts to divorce the material realities of winter from winter imaginaries. Canadians, as I will continue to show in Chapter 4, could remain "winter" people without being perpetually beholden to the everyday experience of living in wintertime. Even though "winter" language dominated these early "all-weather flying" campaigns, the takeaway was that winter conditions did not matter inside TCA's infrastructure. The North Star had all-weather technological systems

[399] The cities were: Montreal, Ottawa, Toronto, Halifax, Saint John, Hamilton, Windsor, London, Winnipeg, Vancouver, Saskatoon, Regina, Calgary, and Edmonton.
[400] Memorandum by D. C. Bythell, "Promotion of All-Weather Flying," 26 January 1950, Air Canada Collection, CASM.

that could remove any potential barrier to mobility wintertime conditions were believed to have. Yet contradictions were emerging. In the toboggan series, for instance, "Canadian Winters" is capitalized, indicating that "winter" and "Canadian Winter" might be two different things. If winter no longer had an effect on flying, why did "Snowbound or Skybound," like the toboggan series, have as its final tagline, "TCA *knows* Canadian winters"?[401]

Conclusion

These confusing and even contradictory characterizations of Canadian winters and the North Star's ability to handle them suggest that all-weather flying promotions appeared at a moment when two different sorts of winter—regular and Canadian, or perhaps material and symbolic—were beginning to separate. The symbols of winter, such as toboggans, hockey teams, pastoral landscapes, and red flannels, remained and continued to bolster Canadian postwar nationalisms.[402] The everyday experiences of winter, however, were much less important to TCA's envirotechnical imaginaries as the airline gradually re-shaped the seasonal rhythms of the year and subsequently the everyday Canadian relationship to time. This was not, as I have argued throughout, a deliberate choice. TCA's advertising executives were responding to fluctuations in traffic, critiques from passengers and legislators, and themes and trends in advertising more generally, but the result was a re-construction of what it meant to live and travel in modern Canada. The advertisements discussed in Chapter 1 emphasized a new, modern version of Canadian geography and history, and those discussed here did the same thing for Canadian seasons, shifting seasonal mobility away from its material realities and towards modern

[401] Advertisement, "Snowbound or Skybound?" 1950, Air Canada Collection, CASM.
[402] They still are. I'm always shocked at how many people I see wearing toques to Canada Day celebrations (in the hottest part of the summer!) on Parliament Hill.

elasticity. Because of when and how it was constructed, the North Star became an ideal manifestation of these shifts, complete with a symbolic name, Canadian construction, and specialized military-to-civilian transfer technologies. Furthermore, as a state airline working with the official advertisers of the federal government of Canada, TCA's promotions through the early 1950s reflected a version of Canadian nationhood more-or-less beholden to the public interest. TCA was articulating what was essentially the only widespread narrative of aviation, environment, and nation, but that narrative was not received as positively as airline executives would have liked. The North Star was met with heel-dragging at every step of its development, from the choice of manufacturing facility to the decision to build a new airplane in the first place. And when it finally made its debut with the Canadian public, passengers were also reticent to accept it as the epitome of Canadian engineering prowess due to one major technological failure: the North Star was really, really loud. The following chapter will tease out a signal from all that noise, using the North Star's failures as a way to explore the instabilities of TCA's emerging Canadian envirotechnical narratives.

3. North Star Failures and the State

In the last chapter, I focused on the discursive and rhetorical "work" the North Star was designed to do at TCA. Billed as the brightest star in the Canadian heavens and the standard-bearer for the future of transportation, it was supposed to get Canadians flying and get them confident in their state airline. Even when seasonal imbalances in passenger traffic threatened the North Star's success, TCA's public-facing material mobilized myths of seasonal mobility to combat what McGregor called the "fluctuation evil." TCA self-fashioned as both part of and separate from older paradigms of Canadian mobility and used the North Star as a key to this self-fashioning. However, for all the work TCA and its advertisers put in, these efforts were not entirely successful. In this chapter, I argue that the North Star was a failure. Although it remained a workhorse at TCA and the RCAF until the 1960s, the North Star did not fulfil its imagined role in national self-fashioning, nor was it embraced by passengers as the last word in comfort and service.

Like other transportation industries through the middle decades of the twentieth century, TCA sought to make their flying experience smooth, streamlined, and aesthetically modern. As I have shown in Chapters 1 and 2, TCA advertisements made a point of reminding passengers that they would not *feel* the speed or altitude, especially with a pressurized cabin, and that the interior of the plane was highly modern and extremely comfortable, with all the latest in textiles and upholstery. Even the tricycle landing gear meant that passengers did not feel like they were on an airplane when on the ground. This was a visual, auditory, and embodied experience; the new paint job, for example, was supposed to make the nose of the airplane seem less short and stubby, and the italicized letters were supposed to create the illusion of speed. "All that is shiny, new, and aerodynamic is brushed with the gleam of aluminum," Mimi Sheller writes in her work

on aluminum and modernity, and "fed into a consumer culture obsessed with modernity and visions of a promised future" of speed and mobility.[403] In this chapter, I will show how the North Star did not live up this promise and defied the aesthetic its architects had worked so hard to cultivate. TCA boosters hoped its newest transport would be both a sublime experience of comfort and an easily recognizable symbol of Canadian envirotechnical ability, and attempted to black-box each of those inside "the great four-engined North Star Skyliner" as both a concept and a machine. However, the North Star rattled, droned, sparked, and spat fireballs. It was used by Howe's and TCA's political opponents as an example of wasteful government spending, and images of North Stars in disrepair and disassembly were printed on the front page of national newspapers. This made it impossible for TCA to close its black boxes—and even if the airline could, the sound of the Merlin engines would carry.

This chapter will trace two related sets of failures. The first is political. From its inception, the choices TCA made in regards to the North Star were questioned by its political opponents, especially conservative politicians concerned with government expenditures, state enterprise, and Howe's brand of liberalism. The loudest of these voices was Ontario Premier and eventual federal Leader of the Opposition George Drew, who had feuded with Howe for years. Drew used the North Star as a way to highlight TCA's shortcomings as a state airline and what he saw as misuse of taxpayer money. Using the conservative newspaper the *Globe and Mail*, which would become increasingly partisan through the 1940s, he argued that TCA catered to the personal interests of its board members, took potential business away from Canadian enterprise, and purposefully offered subpar aircraft and services to the Canadian people. Drew and Howe clashed publicly throughout their respective political careers—Drew was also against the

[403] Mimi Sheller, *Aluminum Dreams*, 88.

Canadian Broadcasting Corporation, another one of Howe's pet Crowns—but there were three major conflagrations between them involving the North Star and TCA. As Premier of Ontario in 1944, Drew questioned the choice to build DC-4M aircraft in Cartierville, rather than at an already-established aeronautics manufacturing facility near Toronto. Several years later, he accused Howe of deliberately limiting immigration to Ontario due to TCA's uncertain involvement in a provincial immigration scheme. Drew ran for Prime Minister as leader of the federal Progressive-Conservative party in 1949, and he made the North Star an election issue, especially its operational costs and loud, unpopular Merlin engines. If the North Star was a symbol of anything in the late 1940s at TCA, it was the airline's political controversies.

The North Star also was something of a technological failure. Passengers did not flock to it as TCA's public relations executives hoped they might. Perhaps they were put off by its constantly being in the news as a political battleground. Perhaps they really were scared of wintertime flying. It was most likely, however, that they simply did not enjoy their trips on board the North Star. Those controversial Merlin engines were, by all accounts, a nightmare. Not only were they expensive to maintain, but they were extremely loud. In the late 1940s, when airlines were still working to make flying seem mundane and comfortable, exceptionally loud engines did not assuage new flyers' fears and became the sort of failure that Edward Jones-Imhotep identifies as "a *condition* that machines experience." The North Star was not simply a technology that did not live up to its potential, as the nineteenth century definition of "failure" suggests, but it was a technology that "in specific places, at specific times, in the presence of certain natural phenomena...failed to work as intended."[404] That is, North Stars carried plenty of passengers and got them safely to their destinations for a decade and a half, but did not fit into the

[404] Jones-Imhotep, *The Unreliable Nation*, 10.

envirotechnical niche that TCA had carved out for them. TCA sought both technological and public-relations fixes for the noise, but was unable to quiet the drone of dissatisfaction with its newest air transport. The airplane's inability to serve TCA's public relations purposes shows the obstinacy of the technology itself in systems that are socially constructed. TCA's attempts to use the North Star to represent modern envirotechnical Canadian-ness were met with resistance from both human and non-human actors, resulting in a failure to perform as a conduit for TCA's vision of Canadian transportation paradigms.

This chapter engages with the field of the history of technology concerned with "failure." A recent area of inquiry for scholars interested especially in "big science" and large-scale projects, focusing on failure distances us from unproductive hagiographic progress narratives, but also prompts us to question the social and technological choices that lead to a technology being labeled "success" or "failure." Can "commercial" successes, for example, such as the North Star, still be deemed failures? In his now-classic 1998 historiography of failure, Graeme Gooday argues that they can. He suggests that "failure" and "success" are not mutually exclusive and failure is subject to the same sort of interpretive flexibility as other social constructions of technology. Failure is "a perspectival and often contested attribution"; technological systems can be imagined as individual artifacts, ways of knowing, networks, or some combination thereof, and therefore failure can be assigned to one or more parts of these imaginaries and not others.[405] Technologies fail for reasons other than the intrinsic characteristics of their component parts and failures do not exist as a counterpoint to or prerequisite for success. Problems that may have been solvable in one context—Gooday uses the massive investment in time and resources used to

[405] Graeme Gooday, "Rewriting the 'Book of Blots': Critical Reflections on Histories of Technological 'Failure,'" *History and Technology* 14:2 (1998): 271.

deal with the noise and volatility of James Watt's condensing steam engines—may not be solvable in another—twentieth-century aero-diesel engines. There is also a temporal contingency to success and failure; despite its initial "success," the transatlantic telegraph cable laid between Ireland and North America in 1858 became a "failure" when it stopped transmitting. It was, however, reconstructed as a "success" in the form of a learning experience in literature raising funds for a new cable.[406] Not all parties who interact with a technological system even need to agree on whether or not it has been successful, as Patrick McCray has shown in his study of big telescopes.[407] This is the perspective from which I am examining the North Star. By tracing two types of failures against the "successes" discussed in the previous chapter, the North Star emerges as more than a pure symbol of the value of aviation to modern Canada or representative of Canadian engineering ability and wintertime mobility. It instead becomes a "real" machine, subject to unreliability, breakdown, controversy, and criticism, and defying all attempts to be black-boxed. Furthermore, the North Star's failure to perform also helped Canadians reckon with postwar debates about the liberal state, partisan media, and the role of the government in supporting technological enterprise.

Political Failures I: North Stars and Provincial-Federal Relations, 1944-1948

The first way in which the North Star was a failure was in its unintended role as a political lightning rod. TCA developed its own rhetoric of triumph over nature, new

[406] Gooday, ""Book of Blots,'" 275.
[407] Patrick McCray, "What Makes a Failure? Designing a New National Telescope, 1975- 1984," *Technology and Culture* 42:2 (2001): 265-291. Even though the subjects he interviewed saw the National New Technology Telescope, a project that was designed but never built, as a failure, McCray argues that the effect it had on the organization and visibility of American astronomy mitigates their claim.

technological systems, and unparalleled comfort in its public-facing material, but North Star discourse also was shaped by federal politics, electoral campaigns, and personal feuds. As mentioned in the last chapter, the North Star's carefully crafted exciting newness was tempered by a long string of political controversies, essentially all of which were instigated by Premier of Ontario and later federal Leader of the Opposition George Drew. A lawyer and military colonel who had served in the first World War, Drew was active in municipal politics in southern Ontario in the 1920s before beginning his career in provincial politics in the following decade as leader of the Ontario Conservatives. By the time we won his second term as Premier in 1945, he had hung his hat on strong anti-Communist sentiment and used Ontario as what historian Penny Bryden calls a "pulpit" to affect national policy.[408] Bryden argues that Drew, leading what would eventually come to be known as the "Big Blue Machine" (blue being the color of conservatism in Canada in contrast to Liberal "red") designed provincial policy as an alternative to federal legislation. He also fought against the centralization of power by the federal government, especially over taxation, pensions, and labor, and attempted to ensure that the shape of postwar Canada would be influenced by intergovernmental discussion. This contest was not easily won; intergovernmental reconstruction talks were marred by "delay, obfuscation, blame casting, and general confusion." Drew and Prime Minister Mackenzie King were cast as enemies by late 1945, and Drew's interests turned "distinctly provincial."[409]

What would eventually become known as the North Star provided the scaffolding for a half-decade of this public feuding between Drew and Liberal Ottawa, which continued even after

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[408] P. E. Bryden, *'A Justifiable Obsession': Conservative Ontario's Relations with Ottawa, 1943-1985* (Toronto: University of Toronto Press, 2013), 35.
[409] P.E. Bryden, "The Ontario-Quebec Axis: Postwar Strategies in Intergovernmental Negotiations," in Edgar-André Montigny et. al., eds., *Ontario Since Confederation: A Reader* (Toronto: University of Toronto Press, 2000), 383.

he made the move from provincial to federal politics in 1948. Because of Howe's role as Minister of Munitions and Supply (which was changed to Reconstruction in late 1944), and his keeping TCA in his portfolio from his Ministry of Transport days, he was Drew's prime target. In the spring of 1944, Drew claimed in the Ontario legislature—and subsequently on the front page of the nationally-circulated and increasingly conservative *Globe and Mail*—that Howe had initially promised the DC-4 contract to Victory Aircraft in Malton, but offered it to Canadian Vickers in Montreal at the last minute.[410] At the time, Victory Aircraft was responsible for building Avro Lancaster heavy bombers, which, according to Drew, had a similar four-engined configuration but were faster, had a longer range, and were therefore better than the DC-4. This made Victory Aircraft the natural choice to build air transports in peacetime instead of putting the 9,000 employees out of work when the bomber contracts dried up.[411] These critiques were only a small part of what an industry magazine called "considerable discussion in Canadian political circles on the choice of DC-4."[412] Conservative politicians in federal Parliament questioned, as Drew did, why the DC-4 was a better choice for Canada's postwar needs than the modified Lancasters that TCA was then using for its transatlantic crossings. They generally cited cost and time, as modifying an existing aircraft would be faster and cheaper than building a new one from scratch, and also saw it as an overreach of state power by artificially throttling new aeronautics research. One MP called the DC-4 "obsolete" and suggested that "the government will waste a lot of money" in developing it that could be better spent fostering Canadian

[410] This was not entirely incorrect, as TCA had approached Victory Aircraft about building an airliner version of the Avro York, one of the potential alternatives to the modified DC-4, in 1944. Victory only ended up producing one York. Pickler and Milberry, *Canadair*, 34.
[411] "Premier Drew Protests Contract Given Vickers Was Promised Malton," *The Globe and Mail*, March 29, 1944, 1.
[412] "Vickers Selection for DC-4 Explained," *Aviation News*, April 17, 1944, 16.

aeronautical science, especially new engine development.[413] As no facilities in Canada were building new aircraft engines, the government buying Merlins from Britain was taken to mean that the state was stifling aeronautical innovation in Canada.

However, Drew took his attacks even further and suggested that the decision to build the DC-4 at Canadian Vickers might have been because Symington, then president of the airline, was "personally associated" with a securities firm that financed the plant, which Drew was quick to point out was not majority-owned by Canadians or Brits.[414] Howe's response in Parliament two days later was that Drew was grasping at straws by connecting Symington and Vickers and that Malton was never really an option for the DC-4 because it was building Lancasters, "the airplane that now has the highest priority in Canadian production." This was not enough for conservative critics who called his "attack" on Drew "unprovoked" or for the *Globe and Mail* editors who wrote that Howe still "left a great deal to be explained."[415] Even before everyday Canadians could fly on TCA's newest transports, they were already being unfavorably compared to older aircraft. Furthermore, despite emphasizing the Canadian-ness of the "compromise" between American fuselages and British engines, questions about the ownership of Canadair and the plant itself, both of which were purchased by an American company in 1946, actually *detracted* from the all-Canadian narrative TCA had worked so deliberately to build.[416]

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[413] Canada, *House of Commons Debates*, March 31, 1944 (Thomas Church), http://parl.canadiana.ca/view/oop.debates_HOC1905_02/1008?r=0&s=1.
[414] The securities firm was largely controlled by Belgian investors, but the implications that it *might* be the Germans—or even Communists!— was not lost on anyone. "Premier Drew Protests Contract Given Vickers Was Promised Malton," *The Globe and Mail*, March 29, 1944, 1.
[415] Canada, *House of Commons Debates*, March 31, 1944 (Gordon Graydon) http://parl.canadiana.ca/view/oop.debates_HOC1905_02/1011?r=0&s=1; "More to be Explained," *The Globe and Mail*, 3 April 3, 1944, 6.
[416] Electric Boat had been a Canadian Vickers customer during both World Wars and bought Canadair, which was a private company leasing the state-owned plant in Cartierville. The "new Canadair," was officially signed over to Canadair in autumn of 1946. The Privy Council formally

Drew's critiques of TCA and its North Stars also emerged in the context of postwar immigration. Drew had spearheaded what became known as the "Ontario Air Immigration Plan," in which 7,000 immigrants from the British Isles were to be brought to the province by air. In spring 1947, Howe claimed that there would be enough TCA North Stars ready to transport the immigrants, but by midsummer it was clear that they would not be available in sufficient numbers. Subsequently, Ontario contracted California-based Transocean Air Lines "for the one very simple reason that it was the only air system at that time which was in a position to furnish us with machines to begin immediately with the plan," Drew told the Ontario legislature in October, with the assumption that TCA would supplement Transocean with North Stars as they were ready.[417] By that time, TCA was operating just under 30 per cent of the immigration flights. By most accounts the initiative was a rousing success. A correspondent for British *Flight* magazine followed the journey of a potential air immigrant and had nothing but praise for the Transocean aircraft—with a reminder that "Trans-Canada haven't the necessary equipment to spare at the moment"—the delicious meals served at stopover points in Shannon, Ireland and Gander, Newfoundland, and how quickly immigrants found work in Canada, sometimes within 36 hours of landing.[418] The first load of immigrants arrived to much fanfare, including Scottish pipes and drums, in August 1947, and the last of the planned 7,000 arrived on March 14, 1948.

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approved the transfer in January 1947; Pickler and Milberry cryptically say that it "was to become a major issue in the lead-up to the federal election two years later." Pickler and Milberry, *Canadair*, 58.

[417] Ontario, *Official Report of Debates*, October 28, 1947 (George Drew), https://archive.org/details/hansard1947ontauoft/page/1005.
Canada, *House of Commons Debates*, March 31, 1944 (Thomas Church), http://parl.canadiana.ca/view/oop.debates_HOC1905_02/1008?r=0&s=1.

[418] Spencer Swaffer, "Operation 'New Horizon:' Ontario Government's Scheme of Air Immigration from Britain," *Flight*, November 6, 1947, 532-533.

The real friction between Drew and Howe on this matter began almost immediately after the last Brit stepped off the plane. Drew planned to extend the scheme, but Howe changed the terms. Because Transocean was not affiliated with the government, there were very strict limits on how, when, and were it could access Canadian airports. Because TCA did not have enough North Stars during the 1947 iteration of the plan, Transocean's airliners would fly into Malton using Shannon and Gander as refuelling stops, but would then have to fly empty to New York for maintenance for the return trip. By the following Spring, however, TCA had enough North Stars to take most of the burden off of Transocean, and therefore did not renew the charter contract between the two airlines, effective April 15. Transocean, which still flew new immigrants across the Atlantic, could no longer land in Canada and any new arrivals would have to enter through the United States. Drew told the Ontario legislature that this was done "without satisfactory explanation of any kind," and interpreted it as a slight against the government of Ontario and a sign that TCA was failing Canada. Because Howe "summarily cancelled" the contract, Drew claimed, the whole scheme had been thrown into disarray; potential immigrants were confused, ticketing agents did not know if they should continue booking new flights through April, and, of course, Ontario's communities would suffer for lack of new Brits.[419] Howe's preventing Transocean from landing in Canada was an "arbitrary decision," Drew claimed in a March 1948 press conference, setting off a chain of "events which threaten to destroy the confidence we have built up" in air immigration and Canada's role in world aviation.[420]

[419] Ontario, *Official Report of Debates*, March 25, 1948 (George Drew), https://archive.org/details/hansard1948ontauoft/page/556.
[420] "Canada Relegated to Unimportant Air Role by Ottawa Blunder, Premier Drew Asserts," *The Globe and Mail*, March 30, 1948, 7.

Inside his larger critique of Howe's "colossal blunder," Drew focused his attention on the North Star. Delays in production, the initial sharing of the RCAF's models, and the fact that other world airlines were getting along with unmodified DC-4s just fine kept the North Star in Drew's crosshairs throughout this ordeal. This was largely because Transocean was one of those airlines using DC-4s; if thousands of new immigrants could come to Canada on regular DC-4s, was it worth spending all this time and money on the North Star? Howe not only had to defend his legislative decision to end the successful charter contract with Transocean, but also defend the North Star itself. He did so by reminding Parliament and the press that Drew had a long history of acting as TCA's "Monday morning quarterback," criticizing every one of the airline's decisions from the outside and after the fact.[421] Howe also emphatically referred to Transocean's DC-4s (and un-modified DC-4s in general), as "substandard." In an attempt to discredit Howe and his aeronautical expertise, the *Globe and Mail* twisted this claim in a March 31 editorial accusing him of "hurl[ing] the first stone" against Drew by blocking his immigration scheme because of Transocean's uses of "substandard" DC-4s:

> "Unlike the Minister we are not aeronautical experts. But we would point out what all air-minded persons know—Douglas DC4 planes...form a large part of the operational equipment of major [American] airlines...It was to keep Canada's nationally-owned air lines in the running that Mr. Howe persuaded the Government to undertake the North Star venture. For this purpose he decided early in 1944 to adapt the DC4 (which he now calls substandard) to this purpose, modifying it to accommodate the British Rolls-Royce engines...This being so why did Mr. Howe take so long to rescue the Ontario Government and the immigrants from the risks of 'substandard' equipment?" [422]

[421] Harvey Hickey, "Howe Denies Scuttling Air Immigration Plan," *The Globe and Mail*, April 7, 1948, 2.
[422] "He Who Throws Stones," *The Globe and Mail*, March 31, 1948.

In Drew's critiques, the North Star was both obsolete because it was just a fancy DC-4 *and* overdeveloped because the rest of the world was getting along just fine without TCA's expensive and time-consuming modifications. "North Star" as a discrete flying machine specially designed for Canadian conditions using Canadian expertise burst out of the black box TCA had designed for it using public-facing material such as John Fisher's "Canadian compromise" reports. In early April an exasperated Canadair President Oliver West told the *Montreal Gazette* that the claims that "North Stars are just DC-4s," and were therefore "substandard and ...outmoded," were not only false but "derogatory to Canadair Limited and to the aircraft it is producing and promoting."[423] Producing *and* promoting is key here; critiques of the airplanes still in production—the pressurized M2s had not yet made their debut at TCA—meant that everyday Canadians might meet their first postwar airliner with prejudice. It also meant that the airplane was being judged by politicians who had not yet ridden on it in front of a public that had also not yet ridden on it, emphasizing the value of the aircraft to symbolic expressions of Canadian-ness.

Political Failures II: Partisan Media and the 1949 Federal Election

Drew remained mostly silent on the subject of North Stars for almost a year after Howe put the brakes on his immigration scheme, bringing it back into the public discourse as part of the 1949 federal election. It was Drew's first run at Prime Minister—he had been elected to the House of Commons in 1948—and his focus on the North Star as an agent of federal-provincial relations when he was at Queen's Park meant that the airplane was primed to be part of his campaign. Drew ran for Prime Minister on a platform on the now "stale Communist issue" which

[423] "H. Oliver West Re-Asserts Company in Aviation to Stay, Hits Claim," *Montreal Gazette*, March 30, 1948, 7.

had helped carry him to victory in Ontario, as well as favoring provincial-federal cooperation over centralization.[424] These, of course, were linked; the "creeping socialism" of the past 15 years of Liberal rule had seen the founding of all sorts of Crown corporations such as TCA and the CBC, which Drew called "abuses of capitalism."[425] Given this, the North Star seemed like the perfect state project for Drew to use as a case study on government mismanagement. This section will explore why and how the North Star became a federal election issue fueled by political *and* media actors in the form of hyper-partisan competing Toronto newspapers.

Canadian elections have notoriously short campaign periods, especially compared to the contemporary United States, and therefore this story mainly takes place between the dissolution of Parliament over the Easter weekend in mid-April 1949 and the election ten weeks later. Using the *Globe and Mail* as his campaign mouthpiece, Drew approached the North Star from several angles. First, he focused on Minister of Defence Brooke Claxton, who he considered responsible for the military applications of the North Star. Although the military North Stars are not my primary focus here, I mention them briefly because the North Star was essentially custom-built for the government; faults in the plane therefore represented faults in state-sanctioned collective visions of Canadian aviation. In a debate in the House of Commons in early April about what Drew called the "pitifully inadequate" state of the Royal Canadian Air Force, he accused the government of "hiding its failure" by squirreling away military North Stars in storage facilities to rot. This was an especially dire issue, he claimed, because the inadequacy of the North Stars had

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[424] Robert Bothwell, Ian Drummond, and John English, *Canada Since 1945: Power, Politics, and Provincialism* (Toronto: University of Toronto Press, 2001), 117.
[425] Lawrence Leduc et. al., *Dynasties and Interludes: Past and Present in Canadian Electoral Politics* (Toronto: Dundurn, 2010), 151. See 148-155 for their coverage of the 1949 election. Ken MacTaggart, "Drew Singles Out Star as Reds' Propagandist," *The Globe and Mail*, June 27, 1949, 1.

prevented Canada from taking part in the Berlin airlift.[426] As a response to Claxton's categorial denial of a warehouse full of "inhibited" North Stars, the *Globe and Mail* found it two days later. At Downsview, aviation reporter James Hornick wrote, was a warehouse with a "dusty floor," "mothballs," and most importantly "$4,000,000 of public funds": North Stars in various states of disrepair strewn about and outside the facility, where they were at the mercy of the elements.[427] The article was accompanied by an impressive four images, which Drew used in Parliament that day as proof that Claxton had been deliberately deceiving the House. Claxton's explanation was that it was a reserve hangar and that his vehement denial of the warehouse was only because of the "vehemence expressed by the leader of the Opposition," but that did not satisfy Drew, who continually called for Claxton's resignation through the campaign period.[428]

By matching Drew's tone and drawing attention once again to the North Stars, Claxton opened the door for a new debate about why Canada was using North Stars in the first place. Once Parliament was dissolved and an election loomed on the horizon, Drew revived his concerns about Canadair, its ownership by the American company Electric Boat, and its relationship to the government, TCA, and Howe. By the end of April, Drew had pivoted this into a full-blown branch of his election platform, echoing his interests as Premier of Ontario. Even the sympathetic *Globe and Mail* pointed out that that this was relatively opportunistic; Drew and Howe had had "intermittent skirmishes" about the North Star for years, but the two "gladiators"

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[426] Canada, *House of Commons Debates*, April 4, 1949 (George Drew), http://parl.canadiana.ca/view/oop.debates_HOC2005_03/401?r=0&s=1.
[427] James Hornick, "$4 Million Public Funds Represented in Planes Being Put in Mothballs," *The Globe and Mail*, April 6, 1949.
[428] Canada, *House of Commons Debates*, April 6, 1949 (Brooke Claxton), http://parl.canadiana.ca/view/oop.debates_HOC2005_03/471?r=0&s=1.

had only infrequently crossed swords since Drew was elected to federal office.[429] On his first campaign tour in the last week of April, Drew proved that his "pre-Easter attack was no flash in the pan" by again calling for Claxton's resignation and challenging Howe to defend the Canadair arrangement and the choice to build North Stars in general.[430] These attacks took on a new fervor mid-May, when the *Globe and Mail* discovered—by some accounts manufactured—a TCA plan to phase out and replace the Merlin engines after the election due to widespread failures. *Globe and Mail* newspaper reporters dug up a variety of "allegations," "secret" reports, and engineers afraid to speak out for fear of losing their jobs to support this, and Drew pointed out in Parliament that he himself had the "common experience" of flying on a TCA North Star that had been delayed because of engine repairs.[431] By the eve of the June 27 election, Drew had combined these concerns; because of their shoddy engines, he argued, North Stars were a poor choice for TCA, the RCAF, and Canada, and if Howe and Claxton would stop evading the issue and reveal the full details of the "Canadair deal," he could get to the bottom of this rampant misuse of taxpayer funds.

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[429] Warren Baldwin, "Drew wants More Data on North Star Deal," *The Globe and Mail*, April 9, 1949, 3.
[430] Warren Baldwin, "'Word Worth Nothing' Drew Again Demands Claxton Resign Office," *The Globe and Mail*, April 23, 1949, 3.
[431] Canada, *House of Commons Debates*, April 29, 1949 (George Drew), http://parl.canadiana.ca/view/oop.debates_HOC2005_03/844?r=0&s=1.
Hames Hornick and William Snead, "After Election Secret Plan Bared to Replace North Star Engines," *The Globe and Mail*, May 16, 1949, 1; "Pilots of North Star Quoted on Records About Plane's Faults," *The Globe and Mail*, May 17, 1949, 1; "U.K. Secret Report Says Merlins Giving Trouble," *The Globe and Mail*, May 19, 1949, 19; "Failures of North Stars Cited In TCA Bulletin," *The Globe and Mail*, May 20, 1949, 1.

These assorted North Star-related issues created a "situation which is of...vital concern to every Canadian taxpayer," Drew told a campaign audience in Saskatchewan.[432] But was it really? Not only had relatively few Canadians actually *flown* on North Stars—political reporter Tom Van Dusen wrote in his 1998 memoirs that "the number of Canadians who had flown on the aircraft could hardly fill a hall, much less carry an election"—but Drew's main political opponent, newly elected Liberal leader Louis St. Laurent, infrequently discussed airplanes in his speeches.[433] Despite St. Laurent's penchant for flying, I can only find one instance of his comments on the North Star in reports of his campaign: that he had flown to the UK in late 1948 and "did not have one moment's anxiety about flying both ways in a North Star."[434] The burden of defending TCA and the North Star generally fell to Howe, who dwarfed St. Laurent in parliamentary experience and acted as his "heavy artillery."[435] By mid-June, Howe had zeroed in on what was becoming as much of a campaign issue as North Star safety: the partisan slant of the *Globe and Mail*, at the time (and today) among Canada's most-read newspapers. He accused "the two Georges," Drew and *Globe and Mail* editor McCullagh, of carrying on a "fully unfounded" and "sinister" campaign against the Canadian aircraft industry in a campaign speech.[436] McCullagh had been "the king of the Toronto newspaper world" since he had overseen the

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[432] Drew was deeply connected to the *Globe and Mail*; his second wife, whom he married in 1966, was *Globe and Mail* publisher George McCullagh's widow. Warren Baldwin, "Liberals Block North Star Details," *The Globe and Mail*, May 25, 1949, 8.
[433] Tom Van Dusen and Susan Code, *Inside the Tent: Forty-Five Years on Parliament Hill* (Burnstown: General Store Publishing, 1998), 27.
[434] Ken MacTaggart, "Liberal Party Opposes Merger of Rail Lines Though Others For It," *The Globe and Mail*, June 4, 1949, 9. For more on St. Laurent and flying, see Pigott, *National Treasure*, 282.
[435] Bothwell, Drummond, and English, *Canada Since 1945*, 115.
[436] The *Globe and Mail* reported on this speech but could not help getting one last dig in—that Howe had incorrectly used the term "roorback" to describe his situation. Ralph Hyman, "2 Georges Campaign Against Aircraft Trade," *The Globe and Mail*, June 11, 1949, 8.

merger of the *Globe* and *Mail and Empire* in 1936.[437] McCullagh had been teamed up with Drew since the war, when the latter used the former's platform to oppose Mackenzie King's national policies. Once elected Premier, Drew allegedly only granted interviews and access to McCullagh-owned news media, shutting out the increasingly left-leaning *Toronto Star*.[438] By the time Drew made the transition to national politics, McCullagh had purchased another Toronto newspaper—the *Evening Telegram*—and a battle of the Toronto newspapers was underway.

The 1949 election represented a particularly high (or low) point in this battle; these Toronto newspapers, as well as to a lesser extent other newspapers in major cities such as the *Winnipeg Free Press*, provided biased coverage that went well beyond the "acceptable journalism" of general editorial slant.[439] By this time, McCullagh's two newspapers had a combined total circulation of over 400,000, approximately 50,000 more than the *Star*, and the *Globe and Mail* in particular had a significant readership outside Toronto, which meant that the whole of Canada was watching.[440] By the end of the campaign, media historian Allan Levine argues, the "facts [had] been so distorted" that the newspapers resorted to going after *each other*. For example, the *Star*'s weekly edition was exempt from certain taxes on newsprint because it was classified as a magazine, which the *Telegram* reported on as a Liberal payoff in exchange for favorable reporting.[441]

The North Star was only one small part of this larger picture of partisanship and the postwar media landscape, but it was still a part. First, it is an excellent case study of Toronto's competing newspapers. While the *Globe and Mail* was accusing Howe of hiding secret North

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[437] Allan Levine, *Scrum Wars: Prime Ministers and the Media* (Toronto: Dundurn, 1993), 175.
[438] Levine, *Scrum Wars*, 193.
[439] Levine, *Scrum Wars*, 194.
[440] Pierre Berton, "The Amazing Career of George McCullagh," *Maclean's*, January 15, 1949, 8.
[441] Levine, *Scrum Wars*, 194-195.

Star deals and covering up TCA's reports of engine failures, the *Toronto Star* came out with headlines such as "Pilots of North Star Laugh at Drew ['s] Charge [that the] Plane is Not Efficient" and brought out its own experts such as BOAC Chairman Whitney Straight, who claimed that "the North Star is an absolutely first-class and economical aircraft in every way."[442] Straight and McGregor corresponded frequently throughout the spring of 1949, and just before the election McGregor told him that "as a Canadian I feel it necessary to apologize for the fact that efforts were made to embroil you in the controversy. It is bad enough to have one government to contend with, as you and I well know!"[443]

Second, it is exceptional because of its longevity in the press. Because of Drew's early rabble-rousing about the North Star's construction and its use in the Ontario Air Immigration scheme, Toronto's (and Canada's) media scene had been pitting Liberal-Conservative and federal-provincial approaches to aviation, industry, and the state against one another for years. At this point, however, the major players were growing tired of the fight. An increasingly frustrated West, still president of Canadair, accused a *Globe and Mail* reporter of conspiring with Drew "to destroy a perfectly good airplane for political purposes." "I'm getting damned sick and tired of all this distortion," he allegedly told the reporter. "I've been very patient up to now, but I can't take much more of it."[444] An editor at the less partisan (although loyal to St. Laurent) *Ottawa*

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[442] Milberry, *The Canadair North Star*, 59. William Stevenson, "Pilots of North Star Laugh at Drew Charge Plane is Not Efficient," *Toronto Daily Star*, May 3, 1949; Stevenson, "Chairman of British Overseas Airways Defends North Star," May 19, 1949.
[443] We Canadians love saying "sorry." Letter from Gordon McGregor to Whitney Straight, 21 June 1949, Air Canada fonds RG-70, vol. 342, LAC.
[444] James Hornick, "Canadair Head Refuses Comment on North Stars," *The Globe and Mail*, May 18, 1949, 13.
In the C. D. Howe fonds at LAC, there is literally a file of clippings that whomever organized them labelled "DREW vs HOWE."

Citizen wondered if "the merits of an aircraft engine have provided an election issue before," because usually "the average person will bog down quickly" if faced with technical details:

> "Mr. Drew's attack on the North Star fleet of Trans-Canada Airlines in the dying days of the recent session of Parliament has its echoes in the campaign now raging. This may mean an unusual interest on the part of the Canadian public in aeronautical engineering, a sign of air-mindedness. Or it may mean that...there is a scarcity of significant issues."[445]

Underhanded comments about the blandness of Canadian politics aside, this proves that on the national political stage, "North Star" had become a buzzword for a political controversy rather than the airplane itself. The special Canadian air-mindedness that TCA cultivated to get its potential passengers flying folded in on itself and became something of a negative; because they were so air-minded, Canadians might be more likely to dissect the choices made by their state airline, or they might be experiencing North Star fatigue that inured them to TCA's advertising discourse. Technological, discursive, and political decisions were connected, since not only were Howe and Claxton held personally accountable for the North Star's engine failures, but Howe complained loudly and often that keeping the North Star in the news had caused the airline to lose business.[446] For some time too after the election, which Drew lost, he became associated with anti-North Star sentiment. For example, after a long speech in Parliament in late 1949 in which Drew argued that the CBC and state-funded National Film Board were propaganda

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[445] For the *Citizen*'s political leanings, see Levine, *Scrum Wars*, 188. "Political Attack on Trans-Canada Airlines," *The Ottawa Citizen*, May 19, 1949, 40.
[446] See, for example, "C. D. Howe: North Star Attacks do Shocking Injury to TCA," *The Globe and Mail*, May 23, 1949, 10 and Frank Flaherty, "Attempt Made to Kill TCA, Howe Charges," *The Globe and Mail*, May 20, 1949, 1.

machines, a Liberal MP dismissed him by interjecting: "talk about North Stars; you know more about them."[447]

In this context, the North Star was a mixed blessing for TCA. Its constantly being in the news certainly helped name recognition but it did not reflect particularly well on the aircraft itself. The North Star's alleged technological problems were magnified on the national stage and its military and civilian applications were conflated. Even though Drew and the *Globe and Mail*'s attacks were relatively transparent and easy to deflect—"rarely was a smear campaign so ill conceived," Milberry writes in his biography of the North Star—it still meant that Howe and McGregor had to constantly defend TCA in the public sphere.[448] The North Star, therefore, was a political failure. It did not reflect a state endorsement of nature, technology, and nation because the "state" did not unequivocally accept it. It also did not have the same symbolic longevity that other airliners, or even other Canadian-built airplanes have had in the public air travel memory. This may be because there were fewer North Stars in the air than, say, DC-3s or Boeing 747s, but they simply did not capture the public's imagination in the way that bush planes such as the De Havilland Canada Beaver or fighters such as the Avro CF-105 Arrow did. McCray suggests that whether or not a technology is remembered—by users, by the industry, in popular or scientific culture—is one of the factors in determining "success" and "failure," and by this analytic, the North Star certainly failed.[449] There is only one extant North Star, a military version currently under restoration by a non-profit called "Project North Star" at the Canada Aviation

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[447] Canada, *House of Commons Debates*, December 7, 1949 (Frederick Whitman), http://parl.canadiana.ca/view/oop.debates_HOC2101_03/765?r=0&s=1.
This was apparently a feature of Drew's politics; in his memoirs, political reporter Tom Van Dusen claims that Drew "had a tendency to latch on to issues of little interest to anyone but himself." Van Dusen and Code, *Inside the Tent*, 27.
[448] Milberry, *The Canadair North Star*, 59.
[449] McCray, "What Makes a Failure?" 290-291.

and Space Museum in Ottawa, and when the Vancouver International Airport blog featured the North Star as their "Airplane of the Month" in 2016, there was only one reader comment: "wonderful but noisy aircraft."[450]

Technological Failures

The other perspective from which the North Star was a failure was in its passenger experience. Passengers complained about two major aspects of North Star service: the food, which was too hot, too cold, too salty, too bland, and served too early, too late, and in too small or too big of a portion, and the noise. Aside from being what McGregor diplomatically called "a racehorse called upon to pull a heavy cart" in his memoirs, the Merlins were extremely loud.[451] Not only were there four of them on the North Star, a number rarely seen on military aircraft excepting the famous Lancaster bombers, but military personnel usually wore sound-muffling communications headphones. Furthermore, the exhaust stacks pointed inwards, focusing the noise in the direction of the fuselage. This arrangement had the added detriment of showing passengers the exhaust flame, a fiery burst that was normal on engine start-up but proved alarming to passengers who were already wary of air travel. A regular transcontinental flight that had a stopover in Winnipeg at dusk was a special problem, since the bright orange flame was only visible in the dark; after its half-hour stop, during which many transcontinental passengers would remain on board, "it would then start up, taxi out, and take off at full throttle, with all four

[450] "Aircraft of the Month: Canadair North Star," *YVR Blog*, October 24, 2016, http://www.yvr.ca/en/blog/2016/aircraft-of-the-month-canadair-north-star.
[451] McGregor, *The Adolescence of an Airline*, 19. Milberry also diplomatically calls them "gas guzzlers" in *The Canadair North Star*, 51.

engines apparently enveloped in flame."[452] These failures were seen by passengers as technological and considered faults with both TCA's service *and* the North Star itself.

What technological noise meant had changed over the course of the twentieth century. At once a symbol of civilization advancing through industry and a source of anxiety and neurasthenia, the noises made by technologies came to be a defining feature of modern life. "New kinds of noises began to offend" in industrializing cities, argues historian Emily Thompson, and by mid-century, "urban dwellers were forced to retreat into private solutions to the problem of noise."[453] Personal automobiles, for example, were produced in the closed "sedan" type in large numbers in North America and Europe by the 1930s and were accompanied by new use patterns and a "new sonic ideal for the car: that of 'silence.'"[454] Mechanical silence was connected not only to the comfort of the driver and their trust in the automobile, but also "a new landmark in engineering excellence."[455] That is, quiet cars were trustworthy, efficient, reliable, and exceptionally modern cars.

Noise had been a problem on the North Star from the start. In a very early test flight with a handful of CNR personnel on board including Chief Medical Officer Kenneth Dowd, nearly everyone considered the plane "too noisy."[456] In these early stages, TCA and Canadair had a clause in their contract that they would take joint responsibility for engine noise reduction, but this detail disappeared after Electric Boat took over in late 1946. Canadair officials decided the

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[452] McGregor, *The Adolescence of an Airline*, 17.
[453] Emily Thompson, *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900-1933* (Cambridge: MIT Press, 2002), 117-119.
[454] Karin Bijsterveld et. al. *Sound and Safe: A History of Listening Behind the Wheel* (New York: Oxford University Press, 2014), 24.
[455] Bijsterveld et. al., *Sound and Safe*, 35.
[456] Test flight questionnaire, c. 1946, Office of the President Papers, Air Canada Fonds RG 70, vol 16, LAC.

blame lay exclusively with Rolls-Royce.[457] It was also always delicately addressed by TCA executives in their public-facing addresses; in an election-season press conference defending Howe, McGregor pointed out that instead of the crippling engine failures that Drew and the *Globe and Mail* had been citing, the most pressing problem with the North Star was that it "has a higher noise level than we think desirable."[458] These problems gave the aircraft the unfortunate nickname of "Noisy Stars" and kept the already-problematic Merlin engines at the forefront of TCA's public discourse. Even though the *Montreal Star* reported in an anti-Drew, pro-North Star editorial that "the question of noise is relatively unimportant," passengers complained constantly about the noise.[459] "The noise is practically deafening," claimed MP Gordon Higgins in the middle of an unrelated parliamentary debate on the federal budget. He hoped that eventually the "flaming exhausts would not be stuck up in the passengers' faces." Higgins spoke "in the spirit merely of constructive criticism," but other passengers were not so cordial.[460] Their critiques ranged from curt—"less noise, less noise, less noise"—to irate: "Shall I complain? I shall. These goddam model 'T' engines you use are just dandy for passenger comfort and conversation. Have you heard of the newer arrangements[?]"[461] One even wrote to TCA to say that they had chosen to fly with another airline for their return trip to get away from the noise. For the most part, any "constructive criticism" left by passengers on their comment cards was in the form of technological fixes for the noise. Some hinted at TCA's eventual solution in the form of the crossover exhausts to be discussed below with suggestions such as redesigning the "exhaust

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[457] Milberry, *The Canadair North Star*, 53.
[458] Canadian Press, "G. R. McGregor, President of Trans-Canada Air Lines..." *The Globe and Mail*, 9 April 1949, 3.
[459] "Attack on the North Star," *Montreal Daily Star*, May 17, 1949.
[460] Canada, *House of Commons Debates*, April 29, 1952 (Gordon Higgins), http://parl.canadiana.ca/view/oop.debates_HOC2106_02/568?r=0&s=1.
[461] "What Others Think of Us: Model 'A's' Soon," *Between Ourselves*, May 1953, 8.

manifolds" to "terminate below the wing," a minor sacrifice in power that would nevertheless "give passengers the measure of cabin quietness they are entitled to."[462] Many ideas were more fanciful than that, such as individual earplugs through which personalized music could be played and the suggestion that the airline "increase wing span to one mile [and] install engines at wing tips and pad with cotton wool to subdue this hellish racket."[463]

Drew also zeroed in on the "psychological hazards" of the Merlin in his critiques of the North Star's appropriateness for TCA and Canada.[464] In a heated press conference in early April 1949, he announced that "this type of motor was designed for military and not commercial flights" and was therefore an unsuitable choice. Not only were they subject to long warm-up times and frequent repairs, but the North Star's Merlins "caused too much vibration and loosened connections, wires, and equipment," and "the high speed at which they run made it too noisy for the comfort of passengers." This was part of his larger demand that Ottawa created a special investigative committee into government spending—a committee of which he would be a member, of course—and made clear that he would use his influence there to interrogate Claxton especially about this issue.[465] He brought up engines so frequently and so stridently in Parliament through April 1949 that George McIlraith, Howe's Parliamentary Assistant who would become Minister of Transport in the 1960s, glibly asked "Do you want to sell Pratt and Whitney [an American competitor to Rolls-Royce] engines? Is that it?"[466] The Merlins were all that anyone

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[462] "What Others Think of Us: Less Noise," *Between Ourselves*, October 1951, 3; "What Others Think of Us: Noise Nuisance," *Between Ourselves*, May 1951, 3.
[463] "What Others Think of Us: Three-Way Suggestion" and "Wot, No Swimming Pool," *Between Ourselves*, Midsummer 1951, 3.
[464] James Hornick and William P. Snead, "Pilots of North Star Quoted About Plane's Faults," *The Globe and Mail*, May 17, 1949, 1.
[465] "Drew Hits Motors Used in North Star Planes," *Winnipeg Free Press*, April 9, 1949, 2.
[466] Canada, *House of Commons Debates*, April 29, 1949 (George McIlraith), http://parl.canadiana.ca/view/oop.debates_HOC2005_03/844?r=0&s=1.

was talking about, from federal politicians in nationally-circulated newspapers to everyday passengers seeking a comfortable ride. TCA was losing control of its carefully crafted narrative of technology, mobility, and Canadian-ness because of an unpopular aircraft engine.

Technological Solutions

This "slight defect" in the North Star's design, as Bothwell, Drummond, and English called it in their work on Canada's postwar politics, was a sign to passengers, politicians, and other "perceptive observers" that "Canada had not quite reached technological maturity." As the North Star "lumbered across Canadian skies," it was not a beacon of guiding light for the future of Canadian transportation, nor was it proof positive of Canada's natural affinity for air travel.[467] Instead, every rattle, every reciprocating part, and every decibel was a blemish on the image of postwar Canadian envirotechnicality that TCA and its supporters were trying to build. In her history of public problems of noise, Karin Bijsterveld argues that it was this sort of expansion of scale that made engine noise—in cars, jets, or trains—difficult to quantify and control. Noise was seen as a symbol of "inefficiently working machines [and]...something that might threaten progress," especially as various noisy machines were becoming part of everyday lifeways.[468] Passengers placed responsibility for North Star noise abatement on TCA—turning what might be considered a mechanical failure into a service one—and it was therefore of an utmost importance

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The left-leaning press speculated that Drew was so anti-Merlin because he had "some interest in" Pratt and Whitney. J. E. Belliveau," Drew Anti-North Star Because Friends Own Rival Company," *Toronto Daily Star*, June 8, 1949.

[467] Bothwell, Drummond, and English, *Canada Since 1945*, 69.

[468] Karin Bijsterveld, *Mechanical Sound: Technology, Culture, and Public Problems of Noise in the Twentieth Century* (Cambridge: MIT Press, 2008), 236. See also Mom, "Orchestrating Automobile Technology" in which he argues that the closing of the car body changed the sensorial experience of driving and focused the user's attention onto the visuality of driving.

to remedy the Merlin's noise problem through some combination of technological fixes and pointed advertising campaigns.

There is evidence that the Engineering department at TCA began working on noise-dampening solutions almost immediately. The solution that the airline eventually implemented was designed by the ironically-named Merlin McLeod, who had been with TCA since 1937.[469] "Mac," as he was known, led the "Job Methods and Development" group inside the Engineering department and had been responsible for a number of other aircraft modifications through the 1930s and 1940s, including a system to test radio tubes and a cowling that regulated engine temperature. The June 1952 issue of *Between Ourselves* featured a fawning six-page profile of MacLeod as well as a cover image of him standing in front of a North Star with modified engines—an honor usually reserved for pretty stewardesses or eye-catching cartoons. It is worth examining the profile for a moment, as it covers every one of the basic tropes of Canadian aviation nationalism. "When 'Mac' was born in 1896 the machine age was just dawning," the profile claims. After a youth spent building "ingenious gadgets" and "modifying—and driving—souped-up racing cars," he settled down with his young wife and "turned his eyes northward to the adventurous life offered by the rugged terrain ringing the Arctic Circle." As all great Canadian aviation innovators apparently do, he found his true calling as a flight engineer for Canadian Airways when it was still mostly a bush flying operation. This was, the profile says, "a period when the sky over Canada was being conquered by the bush pilot. It was a hardy, lusty era...When tales are told—and whether tall or true—'Mac' MacLeod's name is usually linked with some aspect of the adventure." The profile describes a number of "legends" from

[469] Every publication, either primary or secondary, that printed his full name mentions this coincidence.

MacLeod's bush flying days, such as an instance of improvised bush surgery (which explains why he had a limp), and a repair that involved carving a propeller out of a tree "or in some versions of the tale, out of a fence post." MacLeod appeared to have the all-Canadian aviation origin story, which made him uniquely attuned to the major problem facing early airlines in Canada: "taking the adventure out of air travel and replacing thrills with a high standard of reliability and comfort." Although it does not say so explicitly, this profile suggested that MacLeod was the perfect representative for the North Star and its engines, which in turn were meant to be representative of Canadian air-mindedness and modern envirotechnicality. Because of his adventures in the bush, MacLeod *knew* flying, *knew* Canadian conditions, and therefore *knew* how to engineer solutions that fit this national style. In fact, although ostensibly about MacLeod's contributions to the new cross-over system designed to decrease noise, the description of the system is relegated to the last page of the newsletter.[470]

The mechanism itself was quite simple: a flexible manifold that directed both sets of exhaust outlets towards the outboard side of the engines and would therefore dump the gases and noise away from the fuselage into the slipstream. However, the heat and pressure from the combined output caused early iterations of the system to break down as the charged gases slammed against the walls of the manifold. MacLeod and his team moved the exhaust dump to where the two streams of gas converged, reducing stress on the system while still releasing the exhaust away from passengers. This redirection reduced noise by approximately 50 per cent: six decibels overall and speech frequency levels by about 15 decibels. This meant that the North Star was only slightly quieter, but the noise it *did* produce was at a lower frequency, which was

[470] "MacLeod of TCA," *Between Ourselves*, June 1952, 3-7, 22. McGregor, *The Adolescence of an Airline*, 16-17.

deemed more comfortable for passengers. Once it was determined that the MacLeod system did not hamper engine thrust, it was slowly implemented on TCA's North Stars and by the end of 1953 TCA's entire fleet was equipped with MacLeod's cross-over exhausts.[471]

Although TCA had been teasing noise reduction systems for years, MacLeod's cross-over exhausts were officially announced at a demonstration flight and press conference by Director of Engineering Jack Dyment in mid-April 1952. Unfortunately for Dyment, the reduction was not the "vast improvement" TCA had expected, and he had to shout to be heard above the din of the engines. In an interview with Milberry, test pilot Ron Baker remembers that he flew with as little speed and power as possible at that demonstration "to keep the noise to a minimum, bearing in mind that the press had already made up its mind that the flight would be noisy."[472] Of course, it depended on the press. The *Montreal Gazette*'s coverage of the event featured a cartoon of an anthropomorphized North Star sleeping and the lede that "the lion's roar has been tamed and...now a contented purr will lullaby passengers."[473] The *Globe and Mail* was still owned by McCullagh and led their coverage of the demonstration with the following:

> "Trans-Canada Air Lines today demonstrated its 'noiseless' North Star, the result of three years' research and nearly $3,500,000 in public money.
>
> It was noisy."[474]

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[471] Milberry, *The Canadair North Star*, 53-54. B.O.A.C. worked with Rolls-Royce to develop a similar noise-reduction system for their Argonaut airliners. Their system, which was implemented earlier than TCA's and was lighter and reduced noise by slightly more, used a mechanism fairly similar to MacLeod's, but it connected through a sub-frame attached to the engine rather than directly through the engine cowling. "T. C. A. Crosses Over," *Flight*, May 23, 1952, 633.
[472] Milberry, *The Canadair North Star*, 55.
[473] "Muffled Motors Take Noise out of North Star's Flight," *Montreal Gazette*, April 19, 1952, 3.
[474] "After Three Years' Research 'Noiseless' North Star Found Still Quite Noisy," *The Globe and Mail*, April 19, 1952, 7.

It really was. Passengers might not even have noticed the difference—clearly the media weren't terribly impressed—and so TCA had to work to show that their engineers had come up with a solution that was not a waste of taxpayer money and had produced tangible results. In order to remind passengers flying on the new North Stars how much the noise had been reduced, for example, they were handed a small informational card as they boarded. Designed in partnership with the Engineering department and kept "factual" on purpose "in order to inform the recipients...of the reduced noise level [and] how it is accomplished," the cards were designed to prime the flying public for a quieter flight.[475] They showed a close-up of a Merlin engine with a red arrow directing the flow of exhaust over the cowling towards the outside of the wing and explained how "TCA's successful solution takes the gases from the 'fuselage-side' row of cylinders, and dumps them into the slipstream away from the

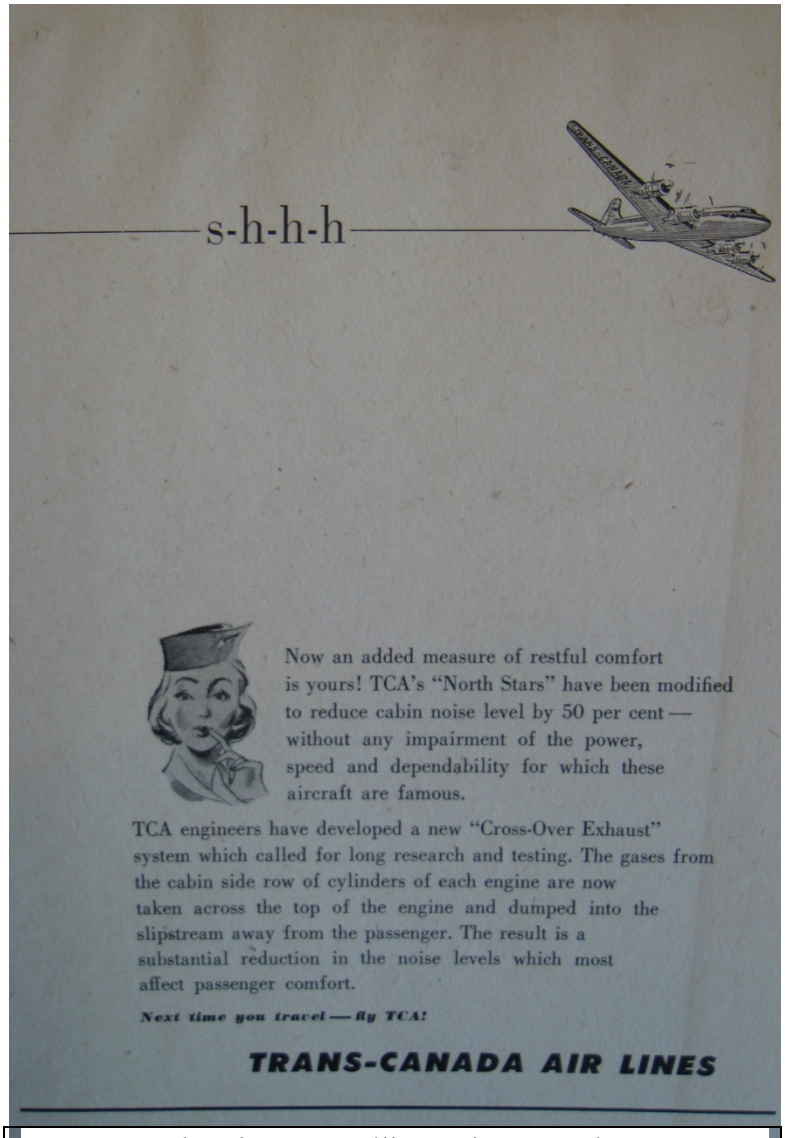

Figure 8: Advertisement selling quieter North Stars, 1954.

[475] Memorandum by J. A. McGee, "Advertising—Cross-Over Exhaust Card," 3 November 1953, Air Canada Collection 003.005 Box 03, CASM.

passenger."[476] The "50%" noise reduction claim was repeated alongside the claim that engine power and efficiency had not been reduced, which gave TCA advertisers the difficult task of publicizing a barely discernable *lack* of noise.

The subtlety required to sell something so imperceptible is obvious in the newspaper advertisement developed to announce the new system in March 1954 (Figure 8) which was dominated by white space to give a feeling of serenity. The top of the ad showed the now-iconic four-engined image of the North Star, with the word "s-h-h-h" appearing to come from its exhaust manifolds. Below, a stewardess holds her finger to her lips and shares information about the "added measure of restful comfort" now available on North Stars.[477] The copy is almost identical to that printed on the informational cards the previous winter, but the "unusual layout," as McGee called it, made the "highly technical" subject palatable by "dramatizing our message." Most importantly, McGee claimed in a memo, "the final result is not only eye-catching, but does a good job of making a negative subject seem positive."[478] Neither the advertising campaign nor the cross-over system were perfect solutions; the North Stars were still loud compared to other aircraft. One passenger flying in a plane with the new exhausts in 1953 still called it a "boiler factory" and suggested that even "second hand units from Lower Slobovia" would be more comfortable, but in general the response was positive.[479] The noise *was* audibly lower and pointing the exhausts away from the cabin also reduced the need for stewardesses to calm passengers convinced the engines were on fire. I have found a small handful of passenger

[476] Adv. 41306, 1953, Air Canada Collection 003.005 Box 03, CASM.
[477] Ad. No. 54-13S, 1954, Air Canada Collection, CASM. This ad had extremely wide distribution, appearing in over 40 newspapers, English and French, from Halifax to Victoria.
[478] Memorandum by J. A. McGee, "Advertising—Quieter North Stars," 11 March 1954, Air Canada Collection, CASM.
[479] "What Others Think of Us: DC Minus I," *Between Ourselves*, September 1953, 15.

comments relaying their relief that the noise level in the cabin no longer created what one passenger called "noise fatigue."[480] Another was pleasantly surprised that "for the first time in seven flights in these aircraft I arrived in Winnipeg relatively refreshed."[481] "Relatively refreshed" might seem like faint praise, but it reflected that TCA had more-or-less regained control over their constructions of the North Star and its place inside the Canadian travel imaginary in the half-decade since it and its engines had become political tools.

Conclusion

By then, however, it was a case of too little, too late. By the time the fleet was fully equipped with cross-over exhausts, TCA's next new airplane was already on the horizon: the turboprop Vickers Viscount. The Viscount arrived at TCA with what *Globe and Mail* aviation reporter James Hornick called a "metallic whine" in late 1954.[482] Its industry-leading quietness, which will be discussed in more detail in Chapter 5, was a far cry from the "Noisy Stars." With the hindsight of history, writes aviation historian Peter Pigott, "it was clear that the North Star was a stable aircraft with the wrong engines," the main benefit of which was getting "TCA out of its Lancaster bombers on the Atlantic service."[483] Without the North Star, he argues, the airline would have been stuck either purchasing older aircraft that would not have made the transatlantic crossing, or waiting to develop an entirely new design, putting the it at a financial disadvantage. Because of this right airplane/wrong engine pairing and associated public scrutiny, airline officials felt pressured to justify the choices they made in developing the North Star. Pigott

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[480] "What Others Think of Us: An Improvement," *Between Ourselves*, Midsummer 1953, 23.
[481] "What Others Think of Us: Congratulations," *Between Ourselves*, November 1953, 19.
[482] James Hornick, "Metallic Whine Marks Arrival of First Viscount," *The Globe and Mail*, December 13, 1954, 7.
[483] Pigott, *National Treasure*, 324.

suggests that because of these concerns, "time and again, the airline's press office pointed out that the North Star had not been 'foisted' on TCA."[484] In a TCA press release on the North Star's first unveiling in 1946, for instance, "exhaustive investigations" were necessary to choose the engines "that have become household words for 'tops in combat.'"[485] They were not, however, tops for transport. Not only did the political currency TCA public relations officials expected from the Merlin's wartime service fail to deliver, but due to the noise, vibration, and fireballs, it did not deliver on performance either. The Merlin's performance on the North Star, the North Star's performance at TCA, and TCA's performance as a state enterprise and public service were interlocking concerns for parliamentarians and everyday passengers.

Because of its technological and political obstinacy, I have argued here that the North Star was a failure. Although it was in service at TCA and the RCAF until the 1960s and therefore "worked" in a rather traditional sense, the social construction of this artifact took place in a way its designers, builders, and image-makers did not anticipate. The North Star was not a symbol of the great "Canadian heavens" discussed in the previous chapter, but was instead a rather hellish experience for passengers who were subjected on occasion to literal fire and brimstone. It was not accepted unequivocally as a natural part of the Canadian transportation teleology, as suggested by George Drew's myopic interest in discrediting TCA, Howe, and Claxton by proving that North Stars were being secretly phased out. Once it made its public debut—and even before, since the choice of Canadian Vickers was controversial—the North Star was clearly out of the Public Relations and Advertising department's control. The vision of itself, of Canadian transportation, and of the past and future of homegrown innovation that TCA's public-

[484] Pigott, *National Treasure*, 329.
[485] Press release, "Canada's New Four Engined Aircraft," July 1947, C. D. Howe Papers, MG-27-B20, volume 94, LAC.

facing material attempted to cultivate using the North Star did not go over as planned and initiated some serious self-reflection at the airline. Howe told Parliament in July 1948 that "no other new aircraft has taken the punishment in its initial operations that the North Star has been subjected to."[486] Although Howe was referring to the physical conditions of multiple Atlantic crossings with quick turn-around times, he could have very well been discussing the discursive beating to which the North Star had been subjected since 1944.

As I have already shown, TCA responded to all of these public relations hiccups by going on the defensive. McGregor's speaking engagements through 1949 and 1950 were themed around defending TCA and its choices: developing the same transport plane for both civilian and military use, for example, or "making haste slowly" instead of latching on to the latest trends.[487] "What we have in the North Star is an efficient, economical aircraft admirably suited to the air transportation industry in Canada," he claimed in a May 1949 speech about the airplane's "controversy" stirred up by "those who obviously are not in a position to comment on the aircraft or the engines with any degree of authority."[488] Of course, when pressed by reporters earlier that spring as to whether or not TCA made money, McGregor had no choice to claim "definitely not." This was not because of the Merlins, the bad publicity, or even because of the poor decision to split the airline's Atlantic travel into its own subsidiary, but because of the "most troublesome...wide disparity between summer and winter traffic."[489] Seasonality, as I discussed

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[486] Canada, *House of Commons Debates*, July 8, 1947 (C. D. Howe), http://parl.canadiana.ca/view/oop.debates_HOC2003_06/219?r=0&s=1.
[487] Speech by Gordon McGregor to the Royal Canadian Flying Clubs Association, Ottawa, 25 January 1949, Gordon R. McGregor Fonds, MG-30 E283 vol. 13, LAC.
[488] Speech by Gordon McGregor to the Kinsmen Club of Kingsville, 17 May 1949, Gordon R. McGregor Fonds, MG-30 E283 vol. 13, LAC.
[489] Script, "Canadian Cavalcade," 26 April 1949, Gordon R. McGregor Fonds, MG30-E283, vol. 13, LAC.

in Chapter 2, was an excellent scapegoat. It pulled focus away from larger political and technological issues and instead placed the blame on the passenger and their relationship with the Canadian envirotechnical landscape. This, in turn, made it seem easier to solve through two sets of advertising and publicity strategies. The first was emphasizing the North Star's Canadian-ness through its all-weather technologies. The second, introducing new routes to even out seasonal fluctuations, is the subject of the next chapter.

4. Time, Space, and Sun Destinations (1948-1960)

Deliberately positioning the North Star as a specialized Canadian technology for specialized Canadian conditions was only one of McGregor's correctives to the "seasonal fluctuation evil" discussed in Chapter 2. The second was the establishment of "southern routes" which produced "traffic peaks when the [Canadian] routes are in their winter doldrums."[490] By the end of 1950, TCA was flying to Bermuda, Nassau, Jamaica, Barbados, Trinidad, and Tampa/St. Petersburg, Florida.[491] These destinations were casually known—and still sometimes are inside the airline industry—as "sun destinations." They originally served a number of purposes, including extending Dominion economic influence to British colonies through the construction of airfields and injection of tourism dollars, but these underlying concerns were less publicly visible than the discourse of sun and sand.[492] The eventual popularity and ubiquity of "sun destination" travel made advertisements for these destinations a staging ground for emerging anxieties about how to best preserve the modern envirotechnical nation in the face of new everyday experiences of space and time. "Sun destinations" became something of an exercise in how comfortable Canadians were with dismantling and rearranging new modern relationships between environment and technology, since the environmental and technological nationalisms that made airplanes appear to be a natural fit for Canadian geographic conditions,

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[490] Address by Gordon McGregor to the Canadian Club, 27 March 1950, Gordon R. McGregor fonds, MG-30-E283, volume 13, LAC.

[491] Californian and Mexican destinations were introduced through the 1950s and 1960s, but they were sold very differently than Bermuda, Florida, and the Caribbean, and therefore will not be discussed here.

[492] Several of these destinations achieved various levels of independence from Britain through this period. TCA would occasionally publish advertisements in local newspapers reminding these newly independent island nations that the airline could "help you develop and increase import/export opportunities." See, for instance, Advertisement 51108-SSN, August 1965, Air Canada Collection 005.002.007, CASM, which ran in the *Trinidad Mirror* on the anniversary of independence.

and made Canadians appear naturally air-minded, was turned on its ear. "Sun destination" travel had the potential to be an extreme version of the airplane's ability to transcend geography and climate, transcending them *so much* that passengers could end up in another place with another climate, completely overturning TCA's previously constructed version of the envirotechnical nation. Even the name is telling in that it presupposed the main motivation for Canadian travel to this region, especially since "sun destinations" were meant to attract more travelers in the winter than in the summer. The sun shining on a cold January day in Toronto is, after all, still sun.

Selling these specific destinations was fraught with challenges, and in responding to them, TCA created a set of contradictory symbols in their "sun destination" material. Unlike the "system" advertisements at the heart of Chapters 1 and 2, TCA had to sell places that *were not Canada* in this material without disrupting Canadian envirotechnical tropes. TCA had to build a narrative that made the inescapable reality of Canadian climate escapable through their technological systems without displacing that reality entirely and without making leaving Canada the natural conclusion to the nation's apparently illustrious transportation history. In this chapter, I will show that TCA's southern advertising engaged heavily with time-based discourse in order to construct those destinations as places that had a unique relationship with short-scale time and longer-scale history, which rhetorically sidestepped concerns with Canadians building loyalty to new places with different climates. The airline's new, fast, ultra-modern machines whisked passengers away to places that were "slow" and separated from modernity. Leaving Canada to visit a "sun destination" made passengers seem *more* Canadian by engaging in wintertime mobility and using communications technologies to transcend climatic obstacles. As I have already shown, using time as a stand-in for travel and mobility was a symptom of the modern experience, but because the Caribbean in particular had a deeply textured relationship

with time, these connections are even more telling. Using the North Star as a time machine in this way shows how the success of the technological systems carrying Canadians south depended on how willing passengers were to accept a specific relationship to winter and its associated seasonal mobility patterns and then how willing they were to accept its discursive flexibility.

It also opens up a larger story about postwar spaces, places, and times. The high-modern transformations of everyday life in terms of speed and scale were frightening and disorienting to everyday consumers; place was becoming increasingly more difficult to define, even as nation-states deployed high-modern megaprojects meant to stand in for belonging.[493] The "speed-up" affected not only production and consumption, but also labor and leisure; vacations were incorporated into annual work patterns and were imagined in terms of "efficiency," paradoxically packing as much vacationing as possible into time set aside for leisure. Time stretched and shrunk to accommodate new lifeways, and therefore so did understandings of what time was for. TCA's "sun destination" advertising featured all sorts of juxtapositions and inversions—of time and space, of slow and fast, of work and play, of winter and summer, of past and present—that provide insight into how it mitigated the contradictions between technological and environmental nationalisms that emerged through the modern disruption of place. Rather than "spaces of flows," as sociologist Manuel Castells has called simultaneous social practices communicated across distance using technological networks, Bermuda, the Caribbean, and

[493] Marc Augé has pointed to the modern experience of travel specifically as part of the creation of "non-places," which are detached from many of the human activities that give "place" meaning and are "established through the mediation of words, or even texts," rather than human experience. Marc Augé, *Non-Places: Introduction to an Anthropology of Supermodernity* (London: Verso, 2009), 94.

Florida were turned into "spaces of seasons," where conspicuous summertime performances could be enacted at a distance while still keeping winter in view.[494]

TCA's public-facing material on Bermuda, Caribbean, and Florida travel manipulated time in three distinct ways, all of which reflected the airline's need to maintain Canadian envirotechnicality inside modern travel, tourism and leisure as well as the unique relationship of "sun destinations" to time. First, TCA extended its decennial rhetoric of condensing travel distances and times to mere hours to an international scale. This played into emerging postwar North American and European concerns with leisure, labor, and consumption by suggesting that travelers could exercise more control over their leisure time if they chose to fly in general, and to fly to "sun destinations" more specifically. Second, TCA's public-facing material played into an earlier place-based visual culture of Caribbean-ness in order to project the idea of "island time," where the Caribbean represented a co-mingling of past and present. Time literally appeared to move slower in the Caribbean and TCA evoked a quaint colonial past, which was especially appealing to Euro-Canadians concerned with the accelerations of the modern world. These first two strategies were not unique to TCA, nor were they unique to Canada or air travel. However, Canada's positioning inside the British Commonwealth and North American postwar tourism culture made the intersection of these two sets of well-worn tropes especially resonant, and amplified transportation's role in the modern destabilization of space and time into the air age.

The third way that TCA's public-facing material sold "sun destinations" in terms of time was connected to that perennial blemish on the airline's public image: seasonality. Although there were many reasons for introducing "sun destinations," especially those in the British

[494] See Castells, *The Rise of the Networked Society*, xxxi-xxxii for an explanation of "spaces of flows."

Caribbean, TCA publicly framed them as ways to even out seasonal imbalances in passenger traffic. In order to do so, the airline emphasized the pleasantness of tropical climates, but in such a way that still maintained the climatic aspects of Canadian environmental identity. Early "sun destination" advertisements stretched perceptions of Canadian seasons by turning these places into "summer destinations." Passengers could choose when, and for how long, they experienced their nation's character-building winters, but they could never eliminate them entirely because the airline projected Canadian climatic conditions onto its tropical destinations. Using the seasons of familiar places as metrics to measure the climates of new places, especially the Caribbean, has its roots in nineteenth century constructions of climate and place, and even early modern travel narratives. At TCA it had the added benefit of allowing the airline to sell *seasons* rather than selling *places*, which further helped to sidestep any concerns about the discursive erosion of Canadian environments by modern technological systems and make sense of their powerful disorienting effects. These time-manipulation tactics were not applied to all destinations in all advertisements at all times, as TCA could not, for example, sell Florida as colonial, but these strategies worked together to build a set of time displacements that reflected anxieties about modernity's threat to Canadian place-based nationalism. TCA's promotional strategies through the mid-1950s represent an attempt to mitigate the ways in which modern time-space compression might destabilize Canadian seasonal identity. However, as I will show in the next chapter, these rhetorical gymnastics could not compete with the jet power's brute influence on mass tourism through the 1960s.

Services and Promotions

TCA's first foray into "sun destinations," to Bermuda in May 1948, hints at the themes that would play a major part in the airline's southern discourse over the next two decades.[495] The service was a result of a multivalent tripartite agreement between Canada, the United Kingdom, and the United States. Canadian carriers had held the rights to land in Bermuda since 1947 as a result of the *United Kingdom and Canada Air Services Agreement Act*, but Kindley Field military base, the only airfield able to handle TCA's aircraft and services, had been leased to the United States during the war. The United States agreed to open the military base to select United Kingdom civilian operators in what became known as the "Basefields Agreement" in February 1948, with the stipulation that they use only the existing facilities. Kindley Field was already operating near capacity, according to TCA executives assigned to the transition, and they worried that even counter space would be difficult to come by, let alone adequate communications infrastructure. In a cautionary memo to the Privy Council in late February, McGregor explained how the timing of the Basefields Agreement, the rush for space, and the technological challenges in Canada and on the island made for a potentially rocky start to TCA's southern services. He noted that if the Basefields Agreement was to be signed within the month—which it was, four days later—then the lengthy process of installing TCA offices and radio equipment would mean that the airline would not be "physically capable" of inaugurating flights until April. A usually straightforward and clear writer, McGregor reverted to diplomatic passive voice to suggest that "serious doubt arises as to the advisability of commencing the service prior to the early fall" because of the "severe summer lull" in travel between Canada and

[495] For an excellent overview of the establishment of TCA's Bermuda services, see Pigott, *National Treasure*, 293-295.

Bermuda. TCA's Atlantic services, consisting then of daily North Star flights to the United Kingdom, were already suffering financially—"due principally to mechanical difficulties"—and McGregor wanted to wait for an "alleviation of the equipment situation" in the form of pressurized M2s before inaugurating Bermuda flights. This, he argued, would give the airline plenty of time to advertise its new service and give passengers time for advance accommodation bookings. Operating prior to autumn would have "multiple adverse effects on the company," the least of which was a $25,000 out-of-pocket monthly expense.[496]

Clearly, seasonality was already on the minds of TCA's executives. Flying south was to be a winter pastime, and the perceived imbalances between summer and winter travel were enough to call into question the date of inaugurating passenger services. Vice President of Operations Bill English extrapolated from pre-war figures an approximate 70 passengers weekly on winter flights—near-capacity for two North Stars—but "our anticipations of summer business are not too bright."[497] Another important aspect of TCA's southern discourse established in these early stages was the value placed on advertising and promotions, which was closely linked to the assumption of lopsided seasonal travel. Howe, for instance, believed a 1946 survey of potential traffic to the Caribbean to be "unduly pessimistic." The only reason, he thought, that projected traffic numbers were low was that "there has been no service between Canada and the Caribbean for some years, and therefore travel habits of our people are not in that direction"; all it would take to build "very satisfactory traffic during the winter" would be pointed "promotional

[496] Letter from Gordon R. McGregor to John Baldwin. "TCA Service to Bermuda and the West Indies," 20 February 1948, Air Canada fonds, RG-70 vol 135, LAC.
[497] Letter from W. F. English to W. S. Thompson, 11 July 1947, Air Canada fonds, RG-70 vol 135, LAC.

work."[498] Although Howe remained a cheerleader for TCA and its services throughout his career, this was no blind optimism. Promotional material appeared to be necessary, as I argued in Chapters 1 and 2, to get Canadians comfortable flying *anywhere*, but sun destinations featured images and imagery that drew on Canadian envirotechnical nationalism in new ways and was therefore vital to reconfiguring both Canada and its southern destinations inside modern paradigms of technology and travel.

At their core, TCA's all-weather flying advertisements and its "sun destination" material from the late 1940s and early 1950s had the same goal: to get Canadians to fly TCA during the winter. However, rather than emphasizing Canadian technological prowess and control over geography, the North Star, which was used almost exclusively on TCA's "sun destination" routes, was black-boxed as a sort of "magic carpet" whisking passengers away to new exotic places. The image and name of the "famous 4-engined 'North Star' Skyliner" appeared frequently, but comparatively little space was devoted to explaining its technological features. The way it was characterized reflected earlier system promotions where airplanes worked as if by magic to make the nation seem smaller and create pride-building aerial views, but in the case of "sun destinations," the geographic, climatic, and cultural differences between the point of origin and the destination created the magic effect. TCA promotional material positioned this "magic" as the height of modern living, in which inexplicable (but proprietary to TCA!) technologies could bring faraway fantasies closer than ever before. As one 1951 brochure claimed, "this is the magic of our time—wherever you are now—you can, in but a little while, be

[498] Letter from C. D. Howe to J. R. Baldwin, 11 November 1946, Air Canada fonds, RG-70 vol 135, LAC.

in another land...lovely...exciting...distant—yet just 'next-door' by air...Your magic wand is your TCA ticket. Your magic carpet is your great TCA 'North Star' Skyliner."[499]

Rather than homogenizing Canada by shrinking it, as the North Star did in system promotions, "sun destination" advertisements collapsed space by emphasizing the differences between the origin and destination. This often took the form of exchanging the landscapes and trappings of one place for another. TCA's employee newsletter introduced flights to Bermuda, for instance, by explaining that travelers could board "a big North Star at Dorval, leave the snow-covered Laurentians far behind and look down on Bermuda's green hills and blue inlets" four hours later.[500] Bermuda and TCA's other southern destinations were represented by their physical environments, including hills, beaches, oceans, and especially the sun. Historian Mimi Sheller has shown that this "familiar sun-sea-and-sand imagery used in Caribbean tourism promotion" has its roots in early modern imperial botany, in which tropical islands were constructed as lush Edens and compared in popular and scientific discourse with the more familiar landscapes in Europe.[501] The Caribbean landscape, in both early modern travel narratives and twentieth-century tourist brochures, depended "heavily on the branding and marketing of Paradise, to such an extent that the myths have seeped into everyday perceptions and understandings."[502] At TCA, the branding and marketing of Paradise was centered around the ideas of "sun" and summer in order to further contrast the destination with the origin and keep the focus on Canadian environmental identity. In December 1949, the Advertising

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[499] Brochure A-545, 1951. Air Canada Collection, CASM.
[500] "Bermuda Bound," *Between Ourselves*, April 1948, 8.
[501] Mimi Sheller, *Consuming the Caribbean: From Arawaks to Zombies* (London: Routledge, 2009), 36. For more on islands as Edens, see David Arnold, "Inventing Tropicality," in *The Problem of Nature: Environment, Culture, and European Expansion* (Oxford: Blackwell, 1996), 141-168 and Grove, *Green Imperialism*, 16-73.
[502] Sheller, *Consuming the Caribbean*, 68.

department distributed palm-tree-adorned "Bermuda Temperature Gauges," to travel agencies and ticket offices; displaying the daily temperature in Bermuda to passers-by on cold, windy Winnipeg or Hamilton streets made them "especially useful" in selling sun destinations.[503] Even when Howe could not attend a publicity trip to Nassau, Jamaica, and Trinidad in November 1948 and asked for a "rain check," McGregor kindly suggested he use "some other name, in the case of the Caribbean."[504] The "magic setting," as one 1950 magazine advertisement claimed, "of sun, sand and sea, of palm trees and gorgeous tropical foliage" was made all the more magic by the hyper-modern technology bringing it closer to Canada, and Canadians appeared comfortable with this modern form of mobility.[505] The *Globe and Mail* reported in 1949 that Canadians had the habit of calling travel agents to book "last-minute" trips to the West Indies on particularly cold days; one TCA travel agent said that "we've been getting calls at midnight—people finishing up a bridge party—and they want a booking for Bermuda or Kingston in three days' time...I thought at first it was just a gag, but I checked up, and each time the people went."[506] Landscape and "sun" were what made these places worth visiting.

This was not to say that the themes of system advertisements were not present in southern discourse. Aerial views remained a touchpoint, and journalists carried on a spring 1948 pre-inaugural flight commented on how aerial views of the "spectacle of the turquoise waters and

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[503] Similar displays, including one that displayed daily temperatures in various Caribbean destinations next to temperatures in the origin city, were released throughout this period. Memorandum from D. C. Bythell, "Memorandum: Bermuda Temperature Gauge," 28 December 1949, Air Canada Collection, CASM.
[504] Gordon McGregor to C. D. Howe, 10 November 1948, RG-70, volume 254, Air Canada fonds, LAC.
[505] Advertisement Adv. 120721, 1950, Air Canada Collection, CASM.
[506] "Yearn to Dodge Snow? Sorry, but South's SRO," *The Globe and Mail*, November 24, 1949, 13.

green vegetation of the pink and white islands" of Bermuda were a "reward" for flying there.[507] Passengers would bring their cameras on board regardless of where they were flying, but widespread constructions of the Caribbean as especially picturesque led TCA to provide detailed information on how to properly take photographs from the air in their southern excursion mailers and memos to travel agents. I will explore Caribbean visual culture in more depth below, but in general, Bermuda, Florida, and the Caribbean were meant to be photographed more than TCA's other destinations. The rhetoric of modern technological views was maintained in these promotions, but with an emphasis on a certain type of view as experienced through a camera lens both in the air and on the ground.[508]

Like their passengers, TCA made practical use of the latest technological changes in print media and advertising in their "sun destination" promotions. New methods of color printing and photographic reproductions "led to greater emphasis on people and settings" in advertising, rather than use, the act of consumption, or hard-sales information such as prices.[509] Both photography and color printing were used far more in "sun destination" promotions than any other type at TCA in the late 1940s and early 1950s, and advertising executives hoped these innovative techniques would evoke some of the tropes of tropicality.[510] Photography, as advertising historian Roland Marchand has suggested, was associated with authenticity and

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[507] Herbert McManus, "Air Service Brings a Coral Playground Within Five Hours Non-Stop of Toronto and Montreal," *Saturday Night*, May 29, 1948, 2.
[508] See John Urry, *The Tourist Gaze: Leisure and Travel in Contemporary Societies* (London: Sage, 1990), 138-140.
[509] William Leiss, Stephen Kline, and Sut Jhally, *Social Communication in Advertising: Persons, Products, and Images of Well-Being* (London: Routledge, 1997), 279.
[510] Photography was adopted early in "sun destination" promotions but remained noteworthy in other categories of advertising material years later; McGee pointed out that photographs "give a strong feeling of dependability and progressiveness" in a 1957 memo on trans-Atlantic promotions, for example. Memorandum by J. A. McGee, "Trans-Atlantic Advertising—Canada," 31 January 1957, Air Canada Collection, 005.005 Box 7, CASM.

"sincerity," as it appeared to the consumer to portray things as they really were compared to "the exaggerated and emotion-laden abstractions" of illustrations. However, photographs could "tell any one of a thousand truths," through staging and techniques such as forced perspective, composites, and post-production light and color retouching. Their value, then, lay in the *perception* of "literal and objective reproduction," as photographs "encouraged the viewer to remain unconscious of any intervening, manipulative creator and to experience the voyeur's sense of directly glimpsing the world's reality."[511] As a purveyor of settings and experiences, TCA embraced the immersive power of the photograph relatively early in this context, which gave promotions for its southern services a much more immediate and lifelike quality than those for other destinations and further implied that taking photographs was to be part of the "sun destination" experience.

Advertisements for sun destinations also made much more strategic use of color than promotions for other markets. A series of blotters for Nassau and Bermuda developed for travel agents in 1949 were "produced in four colours to help promote the colourful nature of the two vacation lands."[512] Generally, fewer "sun destination" mailers were produced than those related to all-weather flying or European travel, almost certainly because high-color printing was more expensive. Bythell often reminded the Traffic offices that "care should be taken" with the distribution of these promotions because of "the use of quadri-colour plates."[513] The fact that four-color advertisements were still produced despite the expense shows how valuable the visual effects of the Caribbean were to TCA's selling tactics. Even in advertisements that were printed

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[511] \Marchand, *Advertising the American Dream*, 149-153.
[512] Memorandum from D. C. Bythell, "Blotters 'Nassau' and 'Bermuda," 18 October 1949, Air Canada Collection, CASM.
[513] Memorandum from D. C. Bythell, "Printed Advtg,-Bermuda, Florida, Caribbean Folder ADV-545," August 9, 1950, Air Canada Collection, CASM.

in black-and-white, such as those destined for newspapers, the term "colourful" appears frequently, as do the names of colors: "silver beaches," "coral beauty," "the blue Caribbean,"[514] One early 1950s brochure distributed by direct mail, in seat-back pockets, and to travel agencies, claimed that TCA travel agents will "help you plan your holiday [and] give you colourful literature."[515] Advertising Manager Donald McLauchlin often referred to the "tremendous pulling power of full colour advertisements, particularly appropriate in depicting the appeal of southern vacation lands" in his *Advertising News* supplements.[516] He also made the connections between the color yellow and the sun, which would "connote warmth and sunshine," and built a 1952 campaign around the color in collaboration with the Nassau-Bahamas Development Board.[517] One destination brochure for Bermuda, Barbados, and Trinidad produced in 1954 used florid prose to tie as many colors as possible to those places:

> "Here—where the rainbow's end is within your reach, you'll discover a holiday land filled with that richest of vagabond's gold—sunshine. In the lazy curves of island beachlines, where turquoise waters meet with pink coral and fine gold sand, your zest for living can be reflected or renewed...Gay confetti brilliance in a thousand tropic flowers, dark rhythm of native Calypso music, the silver-blue of flying fish...all here for you in a vivid kaleidoscope of holiday island colour."[518]

[514] Interestingly, "colourful" is frequently translated as "pittoresque" in French-language advertisements, which still evokes Caribbean visuality.
[515] Brochure A-545, 1951. Air Canada Collection, CASM.
[516] Memorandum by Donald S. McLauchlin, "System Advertising—Bermuda/Caribbean/Florida Services," 30 October 1951, Air Canada Collection, CASM.
[517] Memorandum by Donald S. McLauchlin, "Florida/Caribbean Advertising in Canada," October 7, 1952, Air Canada Collection, CASM.
[518] Note also the number of words related to light, such as "reflected," "brilliance," "vivid," with only the "native Calypso music" referred to as "dark." Brochure 44310, January 1954, Air Canada Collection, 005.005 Box 5, CASM.

The brochure itself is printed in saturated pinks, oranges, yellows, and blues, and Advertising Manager Jack McGee considered it "amongst the most colourful, interesting and effective destination folders ever put out by TCA."[519] Using color was a rather elegant way, in the eyes of TCA advertising executives, to recall the visual tropes of the tropics while making advertisements for those destinations stand out from their other campaigns, as well as those produced by steamship lines, rail lines, and airlines in the USA and Britain. Furthermore, when published in the dead of winter, as "sun destination" advertisements often were, those vibrant colors were just as evocative of other times—that is, summer—as they were of other places.



Figure 9: "Have the summertime of your life this winter," 1951.

[519] Memorandum by J. A. McGee, "Advertising—Europe and Southern Destination Folders, January 11, 1954, Air Canada Collection, 005.005 Box 5, CASM.

No single campaign encapsulates TCA's push to use innovative techniques such as photography and color than a series from late 1951 with the tagline "Have the Summertime of your Life this Winter." The two advertisements in the series were spun off into direct mailers and window displays (Figure 9). One was a stylized cartoon beach scene, including sunbathers, golfers, and animated women in tiny bathing suits, in saturated yellows and oranges. At the center sat a North Star haloed by a bright yellow sun. McLauchlin wrote that this advertisement would tap into the "public's undoubted interest in the glamour of the tropics" through its "'cartoon' treatment depicting in a colourful manner assorted attractions of sunny Florida, Bermuda, and the Caribbean." "Colourful," "glamour," and "the sunny south" were often repeated in both the advertisements themselves and the Advertising department's descriptions of them.[520] The other advertisement in the series, which the Advertising department considered much more successful, combined four-color plates with mixed-media photographic techniques. In it, a black-and-white photographed couple steps through a doorway, dark except for falling white snowflakes, and onto a colorful beach of welcoming illustrated sunbathers. The copy was boilerplate, highlighting that TCA could "carry you smoothly in a few delightful hours to the holiday of your dreams," placing most of the selling work on the images.[521] McLauchlin claimed that contrasting a black and white "couple stepping out of winter" with "the colourful sun drenched charm of a southern beach scene" effectively "portrayed the superior advantages of air travel via TCA to this winter paradise."[522]

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[520] Memorandum from Donald S. McLauchlin, "Florida/Bermuda/Caribbean Advertising," 11 November 1951, Air Canada Collection, CASM.
[521] Adv. 594, 1951, Air Canada Collection, CASM.
[522] Although I don't have complete distribution numbers for this promotion, the four-color magazine version was published in six magazines with a combined circulation of over 250,000. Memorandum from Donald S. McLauchlin, "Florida/Caribbean Advertising in Canada," October 7, 1952, Air Canada Collection, CASM.

In this campaign, color, photography, and different illustration styles converged to make TCA's "sun destination" promotions stand out from its other advertising material, adding to the rhetoric that these destinations were, as one 1952 promotional tagline suggested, "different...and just hours away by TCA."[523] Furthermore, the fact that the couple was stepping out of winter, and not necessarily out of Canada, also helped TCA avoid the contradictions between Canadian climatic identity and the technological erasure of that climate by replacing a place with a time. Photographic tricks and the use of color made these advertisements appear to be a comparison between *summer* and *winter*, not one place and another by using visual representations to connect place, climate, and time.

"Only Hours Away By TCA": Two-Week Vacations and Control over Time

Claiming that extraordinarily "different" places were "just hours away" was how TCA capitalized on the particular rhetoric of the postwar "travel boom" that framed leisure and vacations in terms of control over time. A growing and increasingly mobilized middle-class labor force through the first half of the twentieth century saw the implementation of the paid vacation as what Rick Popp has called a "folkway of modern American life."[524] Popp argues that postwar American prosperity as expressed though travel, tourism, and mobility positioned leisure as a fundamental American right. In so doing, control over *time*, rather than control over money or goods directly, became the hallmark of modern consumer capitalism in the United States. These trends reached Canada as well, albeit on a smaller scale; most workers in Ontario achieved one-week paid vacation leave in 1944, with similar legislation in nearly every other province by the

[523] Advertisement M 52-10-AW, 1952, Air Canada Collection, CASM.
[524] Popp, *The Holiday Makers*, 5.

end of the decade.[525] Pan-North American prosperity coupled with new transportation technologies that increased travel speed and comfort meant that "mass travel came to represent almost everything that was good about North American culture."[526] Because passengers could go further by airplane than they could by rail, steam, or car, the "romantic lands of your holiday dreams are now so near by air"; destinations that were so distant as to be only aspirational appeared to move closer to home, and the time saved by flying made even short trips seem possible.[527] TCA's early "sun destination" material amplified the value of time to modern North American consumption, using the newly standardized rhetoric of paid vacations to show how flying to a warm place would be the best use of a traveler's *time*, the most valuable commodity in the postwar tourism landscape.

Around the turn of the twentieth century "a variety of voices" in North America, including "reformers, businessmen, social scientists, and journalists" began to argue that vacations, previously the purview of the wealthy and middle classes, could benefit the working class, as Cindy Aron has shown in her history of American vacations.[528] This was an extension of the nineteenth-century culture of popular amusements as growing urban populations availed themselves of movie and vaudeville theatres, dime museums, baseball games, and day trips to beaches, amusement parks, and wilderness centres. In Canada, winter carnivals, organized tobogganing clubs, and other seasonal outings continued to cement the value of the winter experience in Canadian constructions of self and nation. A trickle of employers in both nations also began organizing and sponsoring day excursions, renting "company cottages," and engaging

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[525] Dubinsky, "'Everybody Likes Canadians,'" 322.
[526] Dubinsky, "'Everybody Likes Canadians,'" 324.
[527] Advertisement M-52-9-AW, 1952, Air Canada Collection, CASM.
[528] Cindy Aron, *Working at Play: A History of Vacations in the United States* (Oxford: Oxford University Press, 2001), 184.

in other forms of corporate welfare to capitalize on the latest organizational science that suggested that breaks from labor could increase productivity and reduce fatigue.[529] Starting around the 1920s, labor researchers, social reformers, and large employers began to frame yearly paid vacations as a reward for industriousness and a way to secure loyalty. Still often limited to white-collar or management workers, these vacations, which included camping trips and car or train rides to neighboring towns, added further syncopation to the weekly rhythms of urban labor. Vacations also emerged as an issue in unionization and labor disputes through the interwar years. Although a peripheral issue at first—Aron suggests that "union interest in leisure for American workers manifested itself not in a struggle for paid vacations but in a movement for shorter hours"—paid vacations became a standard part of labor negotiations by war's end.[530]

This process, and its associated travel and vacationing habits, has received comparatively more attention from historians of the United States than Canada; Patricia Jasen's 1995 complaint that the field is "virtually silent" still largely stands, especially in terms of how Canadians were awarded and spent their vacation time.[531] In general, the paid vacation came to Canada later than the United States. Fewer than one-third of blue-collar workers in Canada received paid vacations in the interwar period. A 1937 national survey found that just over 21 per cent of the firms surveyed granted paid vacations to their wage earners.[532] This was a pittance compared to the "fully half of the American industrial workers" who Aron claims "came to enjoy the privilege of paid vacations during the 1930s."[533] Despite this disparity, Canadians and Americans were

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[529] Aron, *Working at Play*, 186-199.
[530] Aron, *Working at Play*, 204. See also Gary Cross, *Time and Money: The Making of Consumer Culture* (London: Routledge, 1993), 95-98.
[531] Jasen, *Wild Things*, 21.
[532] Margaret E. McCallum, "Corporate Welfarism in Canada, 1919-39," *The Canadian Historical Review* 71:1 (1990): 68.
[533] Aron, *Working at Play*, 249.

working with a shared vocabulary of vacations and time, especially once postwar prosperity further centered leisure and mobility as aspects of the modern vacation experience.

The elevation of leisure in the form of paid vacations was a relative constant throughout the western world; historian Gary Cross has argued that "one of the ironies of the 1930s and 1940s" was how "the paid vacation became an ideal nearly everywhere...Fascists, communists, and liberals all agreed that modern work required compensatory leisure."[534] Control over time in the form of a vacation was more-or-less universally regarded as a right of modern citizenship and mid-century tourism, with its pre-packaged consumer experiences and invocations to modern technologies of mobility, emphasized the democratization of this right. The North American tourism industry grew exponentially at the end of the Second World War—travel magazine *Holiday* referred to it as "Exodus, 1946"—and with it emerged a new, increasingly standardized discourse of how to make use of this vital modern leisure time using modern transportation networks.[535] The "two-weeks" paid vacation became a colloquialism for the experience of time-off from work, for properly managed leisure, and for autonomy and mobility, especially as the infrastructures of the "travel boom" became part of conversations about a joyous postwar return to normalcy. Mobility and control over time were seen as expressions of unbridled American-ness, and "were manifestations of American economic and technological power."[536]

In the United States especially, the postwar "travel boom" was woven tightly with communication and transportation infrastructures. Travel-and-tourism-related publications, travel features in local newspapers, and even popular films about vacations to exotic locales supported a cultural imaginary of getaways, family road trips, and American wanderlust. Roadside motels,

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[534] Cross, *Time and Money*, 99.
[535] Popp, *The Holiday Makers*, 28.
[536] Popp, *The Holiday Makers*, 144.

highway rest stops, fast food chains, and other now-typical features of the American automotive landscape also found their footing in this period as a way to cater to increasingly mobile groups of everyday travellers.[537] The American experience was somewhat different from the Canadian; Canada's national highway system, despite being announced at the heart of this movement, was not completed until the 1970s and Americans were twice as likely to own vehicles in this period than Canadians.[538] Canada's "travel boom" vocabulary, although linked by culture and proximity with the United States, relied much more on other modes of transportation, especially rail, water, and air travel. It also meant that tourism stakeholders in Canada thought critically about how to construct Canada's tourist narratives in a way that would both be separate from and appeal to the unique American style of automobility. Historian Karen Dubinsky has argued that "the rapid growth of the tourist industry had startling implications for national identity, especially in Canada," since the core of Canadian tourism boosterism was building a public-facing identity

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[537] Travel and landscape historian John Jakle has made a career out of analyzing these features of automobility and has written books on motels, road signs, fast food restaurants, and parking lots. See, most recently, John Jakle and Keith Sculle, *Remembering Roadside America: Preserving the Recent Past as Landscape and Place* (Knoxville: University of Tennessee Press, 2011).

[538] Canada had a population of approximately 12.3 million in 1946 and had just over 1.23 million passenger vehicle registrations. The United States had a population of approximately 141.4 million and just over 28.1 million privately-owned automobiles (not including privately-owned trucks or buses). Using this data, just over 10% of Canadians owned vehicles in 1946, compared to almost 20% of Americans.
"A1: Estimated Population of Canada, 1867-1977," Statistics Canada, archived 2014, https://www150.statcan.gc.ca/n1/pub/11-516-x/sectiona/A1-eng.csv; "T147-194A: Motor Vehicle Registrations by Province, Canada," Statistics Canada, archived 2014, https://www150.statcan.gc.ca/n1/pub/11-516-x/sectiont/T147_194a-eng.csv; "Historical National Population Estimates," Population Division, U.S. Census Bureau," Updated June 2000, https://www.census.gov/population/estimates/nation/popclockest.txt; "State Motor Vehicle Registrations, by years, 1900-1995," Federal Highway Administration, U.S. Department of Transportation, https://www.fhwa.dot.gov/ohim/summary95/mv200.pdf.

that made the country as appealing as possible to American visitors who might make use of their leisure time by traveling to Canada by car.[539]

Neither air travel nor the Caribbean have been considered a central part of this postwar tourism imaginary in North America, mostly because of the prohibitive costs.[540] Compared to a weekend at the lake or a drive to a nearby city, an air travel vacation, especially one that involved crossing an ocean, was out of reach for the majority of North American travellers. However, air travel should be included in the study of postwar "travel boom" discourse. First, air travel was becoming increasingly accessible and affordable, thanks to military-to-civilian transfer technologies, strengthened airport networks, and postwar economic prosperity more generally. TCA, for instance, carried approximately 185,000 passengers in 1945, 540,000 in 1948, and just under 1 million in 1951, outstripping general population growth. TCA, like its counterparts in the United States and Europe, also introduced "Fly Now Pay Later" installment plans and family fare discounts through this period. McGregor may have referred to these special fares as a "plague" in his memoirs, but they at least provided the illusion of increased access.[541] Next, Popp has argued that advertising, rather than actual travel, was the "primary ingredient" of the tourist trade; the postwar travel imaginary was built on aspirations.[542] Trips were sold as fantasies, and air travel was especially fantastic as new dynamic forms of leisure were incorporated inside postwar paradigms of control over time. Airline advertising promoted a future of travel, where the time-based control and mobility first manifested in urban amusements

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[539] Karen Dubinsky, *The Second Greatest Disappointment: Honeymooning and Tourism at Niagara Falls* (Toronto: Between the Lines, 1999), 178.
[540] Florida is somewhat of an exception, since it was generally accessible by car to those living on the eastern coast of the United States.
[541] McGregor, *The Adolescence of an Airline*, 9.
[542] Popp, *The Holiday Makers*, 19.

could be pushed to the extreme by bringing exotic locations inside the realm of possibility.[543] Finally, as I have argued here and elsewhere, tickets might have been expensive, but seeing TCA advertising cost only a subscription to a newspaper or magazine, and potential passengers could send away for brochures and information packets for the price of postage. Canadians were exposed to the airline whether they could afford tickets or not. The language of Canadian air travel was widely proliferated, and TCA was essentially the only source of that language. Air travel in general, and TCA in Canada in particular, was clearly a part of imagining leisure, mobility, and the post-war "travel boom," and the extra-fantastical nature of traveling by air to the Caribbean made that imaginary especially potent. Because so few everyday Canadians could actually make the trip, the value of studying this type advertising lies in the discursive value of how it represented the ultimate control over time.

As was the case in postwar airline advertising in general, promotions for sun destinations reflected an aspirational leisure, working with a shared vocabulary of vacations to show their compatibility with everyday patterns of leisure consumption. TCA's promotions alluded to how steamships, the other viable option for travel to the Caribbean, were not compatible, since the long travel times would prevent them from fitting inside "two-weeks" of vacation. With air travel, as one French-language advertisement claimed, "vous ne perdez plus—comme autrefois en mer ou en chemin de fer—le temps précieux de vacances toujours trop brèves."[544] Through a series of catchy rhyming slogans through the early 1950s, such as "you get more time *there* when you go by air" and "waste no time on the way when you fly TCA," the airline placed control

[543] See especially Popp, *The Holiday Makers*, 16-19.
[544] "You no longer lose—as you previously had by sea or rail—all-too-brief precious vacation time." Advertisement M-49-7F-AB, 1949, Air Canada Collection, CASM.

over time at the center of its promotions and suggested that time-dilation was the unique feature on which it could capitalize.

Although TCA's public-facing material manipulated time in a number of ways, these taglines served two purposes unique to the scale of hours or days, rather than months or years. First, they made the "two-weeks" vacation seem longer by making the travel peripheral to the destination experience. Air travel was still a source of anxiety for travelers, and focusing on the sailing, golf, beach lounging, and other activities that could fill "two-weeks" had the potential to assuage some of that anxiety. Second, it reflected the modern tendency to conflate distance with travel time by hinting at how much farther vacationers could go if they chose TCA. The trip to Florida or the Caribbean took only hours—compared to days by rail, car, steamship, or some combination of the three—which extended the reach of the everyday traveler and made sun destinations seem like an effective use of vacation time. The activities that could be squeezed into the "extra" time afforded by air travel were easy to represent visually in promotional material and therefore became pictorial cues for both control over time and the exoticism of "sun destinations." TCA's public-facing material subsequently painted its southern destinations as materially different than Canada, falling back on visual tropes of tropicality.

Manipulating time on this slightly smaller scale helped TCA turn its aircraft into time machines operated by the choices made by individual passengers, decentralizing the technological act of flying and focusing on the sensory perceptions of modern mobility. The North Star was described in early public-facing material in a fairly standard way: complimentary meals, "club-like atmosphere," attentive service, and "pressurized cabins...powered by 4 Rolls-Royce engines."[545] These rote descriptions appeared across campaigns, media, and time and

[545] Advertisement M-49-11-AW, 1949, Air Canada Collection, CASM.

were consistently overshadowed by the superlative language of the destination, creating an atmosphere of what the advertising department frequently referred to as "destination appeal." In his *Advertising News* memos, McLauchlin argued that the Canadian public had an almost universal interest in the tropics, and emphasizing the destination capitalized on this interest while making the act of flying—perhaps the greatest source of anxiety for potential vacationers—peripheral. "The real desire," as he called it, "to visit those sunny isles" was piqued by saturated colors, eye-catching images, and copy that drew the reader's attention inevitably southward.[546]

Sun destinations, more than any other, seemed to attract passengers with a sort of geographic magnetism, binding *how* they got there with the initial choice to travel, since TCA self-fashioned as the only way to succumb to the draw of the tropics within the available "two-weeks."[547] Compared to system advertisements and material selling the USA or Europe, promotions for TCA's southern services made generous use of the second person singular, which emphasized both the intimacy and immediacy of the tropical vacation. Rather than highlighting TCA's achievements in the air age—what "we" have accomplished—sun destination material focused on the agency of the traveller. The activities and experiences "you" could find in the Caribbean, such as "swimming in those wonderful blue waters, resting in the sunshine, bicycling between the tall hedges of Oleander, with plenty of golf and tennis, boating and deep sea fishing, too," took center stage and linked the act of travel to "destination appeal" through the implicit theme of choice and control over time.[548]

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[546] Memorandum by J. A. McGee, "Bermuda/Caribbean Advertising—Canadian Magazines," 3 October 1953, Air Canada Collection, CASM.
[547] This was emphasized by language that claimed "Bermuda's sunny beaches beckon," or "Lands of eternal summer call you."
[548] Advertisement M-49-7-AB, 1949, Air Canada Collection, CASM.

Vacationers seemed to be spoiled for choice, and that choice was deeply embedded in the act of simply existing in the tropics. Going to and being in Bermuda, the Caribbean, or Florida provided travellers with extra hours to pack their limited two-week vacations with all these exciting activities. Some of this discourse was tied to how fast the North Star flew—the first Bermuda campaign worked with the tagline "...it's less than 5 hours away!"—but it was also folded into characterizations of the destinations themselves.[549] There was something about the tropics, TCA promotions suggested, that caused time to behave differently and added more activity-filled hours to the day, speeding up the speed-up of labor and leisure even further.[550] In the next section I will show how this played into the idea of the tropics as a neo-colonial paradise, but it also amplified the time-stretching abilities of TCA's North Star services as the only available method of reaching these destinations. One magazine advertisement from the "pre-winter" 1949 season provided a pictorial version of this relationship (Figure 10).[551] The silhouette of a North Star sits at the lower third of the advertisement, with its flight path marked vertically up the center



Figure 10: "The Caribbean!" 1949.

[549] Advertisement M-49-2-AB, 1949, Air Canada Collection, CASM.
[550] Of course, being further south meant that there *were* more hours of winter daylight compared to Canada, but this geographic fact was not highlighted in TCA promotions.
[551] Memorandum from D. C. Bythell, "Magazine Advertising: Caribbean/Bermuda," 11 October 1949, Air Canada Collection, CASM.

in a soft green. Once past the headline—"The Caribbean!"—and a horizontal border of coral, it branches out into six distinct paths, pointing to illustrations of features such as "coral seas!" "the tropic beauty of Barbados!" and "fun in Florida!"[552] Once it entered "the Caribbean!" the North Star's one flight path becomes many, disrupting the fly-over lines of more traditional air route maps. The idea of collapsing many potential activities into one trip appears in other campaigns as well, such as a 1950 advertisement that positioned horseback riders, golfers, cyclists, water-skiers, sailboats, fishermen, and sunbathers on a single airline ticket.[553] It suggested that flying to Bermuda, the Caribbean, or Florida was the most effective use of a traveller's tourism dollars, and subsequently their leisure time.

Campaigns such as these made air travel a technological method by which time could stretch to include many activities, but also characterized the Caribbean as a special place where that time-stretching was most noticeable. Other sun destination tourism stakeholders also forwarded the rhetoric that time behaved differently in the Caribbean. TCA collaborated with the Bermuda Trade Development Board on several specialized excursion fares and related advertising campaigns through this period, using "the magic of air travel" to open "up exciting new opportunities for Canadians to enjoy this famed...paradise."[554] They made use of many of the abovementioned time distortions and advertising techniques. Color, for example, especially the repeated use of a pink called "Bermuda Coral" to link Bermuda and TCA branding, gave the illustrations "an air of authenticity."[555] In a series of four advertisements scheduled for both

[552] Advertisement M-49-1-ABW, 1949, Air Canada Collection 005.001.010, CASM.
[553] Advertisement M-50-4-ABW, 1950, Air Canada Collection 005.001.010, CASM.
[554] Advertisement M-52-15-AW, 1952, Air Canada Collection 005.005 Box 3, CASM.
[555] Memorandum by J. A. McGee, "Co-ordinated Advtg.—TCA/Bermuda Trade Development Board," 31 October 1952, Air Canada Collection 005.005 Box 3, CASM.

magazines and newspapers between 1952 and 1954, time, space, color, and technology are conflated in such a way as to render them almost interchangeable:

> "The first thing you notice in Bermuda is the tempo—easy-going and unhurried...Where days are coloured with blue sky, blue sea, pink sandy beaches. Where hours are busy picnicking, shopping, sightseeing...or loafed away under a kindly sun...[S]peed to these Islands in a few hours in a sleek modern airliner."[556]

Hours and days are constructed here as Bermuda's most desirable exports, only accessible to Canadians inside their "two-weeks" with the help of TCA. As the earliest Bermuda Trade Development Board collaboration claimed, "here in these lovely Islands are sunny hours for tennis, golf, fishing, swimming[;] lazy hours for loafing on soft sandy beaches[;] laughing hours for sightseeing, shopping, bicycling [and] starry hours for music and moonlit dancing."[557] These rhetorical strategies made the south an ideal place to exercise control over the relatively new paid vacations afforded to Canadians. Airplanes could collapse distance, but the particular places they brought closer to Canada could respond almost anthropomorphically to the postwar need for *more time* to engage with these new forms of leisure. As one 1953 photography-based campaign suggested, "you choose your pleasure, set the tempo. The 'lands of sunshine' meet your wishes and match your mood."[558]

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[556] Advertisement, "Wonderful Wonderful Bermuda," August 1954, Air Canada Collection vol. 005.005 Box 5, CASM.
[557] Advertisement, "TCA Flies you away to the Best Holiday You'll Ever Have," 1952, Air Canada Collection, CASM.
[558] Advertisement, "There's Vacation Magic in the Air," c. 1953, Air Canada Collection, CASM.

"Sun Destinations" and the Women's Market

TCA advertising executives were under the impression that many of these techniques would appeal to a specific type of passenger: women. Advertising historians have long argued that by the early twentieth century, advertisers envisioned the average consumer as female; their status as household experts was further elevated by the popular "home front" image of women during the second World War.[559] A series of 1949 advertisements featuring confessional-style copy such as "I sold him on Bermuda!" "Bermuda here we come!" and "This is us this winter!" portrayed women as the leisure decision-makers, slyly showing their audience how they managed to, with the help of TCA's educational material, convince their husbands to travel TCA to the tropics. As "soon as he realized those beautiful pink beaches were *only hours away* by air, it was easy. We've always dreamt of going. It never seemed possible within a time limit of one or two weeks. But now we know, we're all set to go!"[560] Bythell



Figure 11: "This is us this winter!" 1950.

[559] Marchand, *Advertising the American Dream*, 66. See also Hill, *Advertising to the American Woman*; Katherine J. Parkin, *Food Is Love: Advertising and Gender Roles in Modern America* (Philadelphia: University of Pennsylvania Press, 2006), especially 1-30.
[560] Advertisement M-49-7-AB, 1949, Air Canada Collection, CASM.

claimed that the "copy theme" of this campaign, which ran in 10 newspapers in central Canada and later in magazines and as a direct-mail promotion, was "directed in a large degree to women." In a clever bit of meta-advertising, the women in this campaign brandished real TCA brochures in which tropical vacation scenes, including men and women frolicking on a beach, are clearly visible. These advertisements were designed to "stimulate early interest and planning of winter holidays...[and] to secure more direct action in the markets offering greatest potential for this travel," which included ordering brochures and contacting TCA agents.[561]

Consumer historian Lizabeth Cohen has shown that by the late 1940s, advertisers began to focus on family spending units as "men gained more influence over consumption...exerting more control with the expansion of credit."[562] Expensive purchases such as airline tickets, which could drain both financial resources and precious vacation time and often required the use of credit, fell solidly inside the realm of influence of male consumption. Therefore, the "direct action" of woman consumers was generally considered to be showing TCA literature to the men in their lives instead of booking tickets directly.[563] This allowed TCA advertisers to walk a thin line between propping up women as leisure decision-makers and men as the actual purchasers. Advertisements for honeymoon travel to the Caribbean in bridal magazines, for instance, claimed that "the enchantment of tropic dreamlands" were "all yours in a few hours of pleasant travel," but only after you "talk it over with 'The Man.' Then let your Travel Agent or nearest TCA

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[561] Memorandum from D. C. Bythell, "Newspaper Advertising—Bermuda/Caribbean," 20 October 1949, Air Canada Collection, CASM.
[562] Lizabeth Cohen, *A Consumer's Republic: The Politics of Mass Consumption in Postwar America* (New York: Vintage Books, 2004), 313.
[563] Later campaigns would echo this language, but with daughters asking for graduation trips (for example) from their fathers. See Advertisement 5-52-TAM, 1955, Air Canada Collection, CASM, which features a young woman wearing a mortarboard hat and holding an actual TCA brochure, claiming, "isn't Daddy wonderful? He's taking us to Europe!"

office help you plan your honeymoon travel."[564] This campaign was printed in both the Spring and Fall 1950 issues of *Brides Book* magazine (circulation 10,000) and was paired with "local, highly personalized" direct-mail campaigns featuring the "This is us this winter!" and "I sold him on Bermuda!" promotions.[565] TCA's southern services were also featured in a "commercial 'editorial' column" called "Barbara Brent's Buys and Whys," that appeared on the family pages of 62 weekly newspapers with a total circulation of over 600,000 and "exceptionally high readership by women."[566] The column asked women to "say 'Pooh!' to Father Time..." and get "more time *there* when you go by air." Its call to action was not to contact a TCA travel agent to purchase a ticket, but rather to order "a wonderful 12-page, full-colour booklet on Bermuda and the Caribbean Islands—it's FREE!"[567]

These techniques of selling to families, women, and honeymooners reflects what Cohen refers to as "segmenting the mass," in which mid-century advertisers engaged differently with different potential markets.[568] TCA's response to the "women's market" varied throughout the 1940s, 1950s, and 1960s, but, as I have argued elsewhere, the airline assigned a great deal of agency to its female consumers by showing women in positions of power as savvy purchasers, family educators, and airline employees.[569] TCA certainly segmented its marketing in other ways

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[564] Advertisement M-50-1-AW, 1950, Air Canada Collection, CASM.
[565] Memorandum by D. C. Bythell, "Advertising—Bermuda/Caribbean—'Brides Book,'" 14 February 1950, Air Canada Collection, CASM.
[566] Memorandum from D. C. Bythell, "New Advertising Campaign—'Buys and Whys,'" 22 January 1950, Air Canada Collection, CASM.
[567] Brent's other "Buys" that week included Red Rose tea, which "costs less than a cent a cup," Jell-O puddings as a "grand way to give your children more milk," and Heinz tomato juice, cream of tomato soup, ketchup, and chili sauce—"all the luscious tomato flavour you long for!" "Barbara Brent's Buys and Whys," 22 January 1950, Air Canada Collection, CASM.
[568] Cohen, *A Consumer's Republic*, 292.
[569] Blair Stein, "When a Husband Travels." See also Blair Stein, "Lorsque Madame Voyage: Women and Air Travel at Trans Canada Air Lines," *ActiveHistory.ca*, November 17, 2015,

as well, producing geographically-specific advertisements and separate campaigns for Americans, developing specialized material for travel trade magazines, and timing its advertising in farming publications around the harvest.[570] However, unlike consumer goods, or even air travel in the United States, TCA had no major competitors. Instead, the airline had to sell places in competition with other places, and anxiety-producing methods of travel against more familiar ones. In the case of "sun destinations," the *place* had to appeal to a broad mass of potential travellers. TCA capitalized on this concern by constructing its southern destinations as places where time behaved differently and where two weeks of paid vacation could be parlayed into endless choices of enjoyable pastimes in unimaginably colorful, exotic settings.

Like air travel in general, sun destinations represented an imagined aspirational future of choice, mobility and leisure, especially because of the associated touristic activities and what geographer Rob Shields calls "place-images" that "come to be held as signifiers of [a place's] essential character."[571] These reductionist, stereotypical, over-simplified discursive tropes made tropical destinations appear to be polar opposites to Canada, further evoking the region's exoticism and the language of modern technological control over time.[572] The North Star might have made Bermuda and its promise of endless golfing, sunbathing, and bicycling *seem* closer to Canada, but promotions reminded travellers that its climate, wildlife, and culture were still miles away. TCA frequently used the word "different" in its early advertisements to stand in for

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http://activehistory.ca/2015/11/lorsque-madame-voyage-women-and-air-travel-at-trans-canada-airlines/.

[570] This is especially evident in how TCA advertising executives justified their editorial choices in advertising to the American market. They, in general, focused on TCA's routes, technologies, and service, catering to what McGee called "'snob' appeal." Memorandum by J. A. McGee, "Magazine Advertising in the U.S." 6 January 1956, Air Canada Collection, CASM.

[571] Shields, *Places on the Margins*, 47.

[572] No terrible pun intended.

general feelings of displacement and distance in this confusing stretching and shrinking of time. One national 1949 campaign with a circulation of over 180,000 mimicked a handwritten letter from a woman named "Peggy" to her friend "Helen," claiming, "Bermuda is certainly different."[573] Another from 1952 featured the simple headline, "Nassau is different." with no explanation for what that meant except that Nassau could provide "a vacation that's *different*."[574] Of course, these "different" places were only accessible via TCA's aircraft and services, and they positioned themselves as a purveyor of technologically-driven time-travel experiences.

"The Isles of Fabulous History": Tropicality and Time Distortion

Using images of sunbathers and golfers in promotions for TCA's southern services combined with claims that "you get more time there when you go by air" emphasized individual agency, choice, and time management on a scale that everyday travellers could understand. Control over the "two-weeks" vacation was a type of time travel that helped TCA situate itself inside postwar paradigms of mobility, travel, and consumption. The way the destinations themselves were pictured and described, however, also invoked time travel on a much larger scale. The images and claims about Bermuda and the Caribbean that appeared in TCA's public-facing material relied on earlier Caribbean place-images in order to suggest that travelling to a sun destination felt like travelling to an earlier era, the rather nebulous and ill-defined "colonial" or "old-world" times. The "tempo" of the tropics appeared to be so slow that they became an "anachronistic space" stuck in a pre-modern past, especially when directly compared to the

[573] Advertisement M-49-2-ABW, 1949, Air Canada Collection 005.001.010, CASM. Memorandum from D. C. Bythell, "Advertising—Passenger—Bermuda—Trans-Atlantic," 15 November 1949, Air Canada Collection 005.005 Box 1, CASM.
[574] Advertisement M-52-10-AW, 1952, Air Canada Collection, CASM.

modern technologies and amenities on board the North Star.[575] The comparison was not always negative, though, as "island time" was constructed as a respite from the dizzying pace of the modern world despite being almost exclusively accessible by time-compressing airplanes. Taking a tropical vacation would cause time to accelerate, as the speed of the North Star could transport passengers to a "different" place "almost before you realize it can be true," and decelerate, as the "old-world atmosphere of these romantic isles" could stretch to include endless vacation activities as well as a variety of historical eras.[576] It therefore became possible for sun destination travel to include what McGee referred to as both "quick and leisurely vacations."[577] Turning these islands into "old-world" destinations steeped in colonial British-ness repositioned Canada inside the British Dominion, and repositioned the Caribbean inside history and space as it related to Canada. Furthermore, these larger-scale time manipulations had a different intended effect on the traveller, separating them from the modern experience of time.

Constructing the Caribbean as a place stuck in time was accomplished in a number of ways. Pictorially, destination brochures borrowed from the decennial promotions by using old-looking maps and images of early modern compass roses and caravels. Horse-drawn transportation was especially popular in these sorts of promotions, as it did the double work of highlighting the modernity of air travel and the "backwardness" of the Caribbean, as will be

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[575] In *Europe and the People Without History* (Berkeley: University of California Press, revised edition 2010), Eric Wolf deliberately challenges longstanding historical and anthropological trends that suggest that only Europeans were capable of making history, so to speak. Assuming that indigenous people in colonial settings are "without history" (or, in this case, without present, since they exist exclusively in the past,) erases centuries of "confrontation, killing, resurrection, and accommodation." (18) It also suggests that their only historical value is inside European matrices of expansion, production, and "society" as a concept.

[576] Brochure A-545, 1951 and advertisement M-50-4-AW, 1950, Air Canada Collection, CASM.

[577] Memorandum by J. A. McGee, "Bermuda/Caribbean Advertising—Canadian Newspapers," November 4, 1953, Air Canada Collection, CASM.

discussed in more detail below. In early advertising copy, the Caribbean was assigned a great deal of "old-world charm," whatever that means. Which "old" world the airline was referring to, and the particular age of the "old" world was not constant, and TCA material mobilized whichever images best fit the individual promotions. The "old world" therefore became a purely constructed assemblage of references that reflected mid-century North American concerns rather than engaging with history in any meaningful way.

For example, the callouts to the region's pirate past—"the historic haunts of the buccaneers"—referenced frontier myths of early modern empire's tenuous grip on the liminal spaces of the Indies.[578] "Buccaneers of old who made the Caribbean their headquarters," as one southern brochure referred to them, were an evocative image.[579] Literary scholar Erin Mackie has commented on how "the trope of piracy has always been highly mobile," especially in the imaginary of commerce, law, and empire.[580] Pirates and the tropical-island-adventure myths associated with them were particularly popular in mid-century North America, as Walt Disney's *Swiss Family Robinson* (1960) and "Pirates of the Caribbean" amusement park ride (1967), and Errol Flynn's various swashbuckling pirate films of the 1940s and 1950s capitalized on constructed comparisons between their alleged lawlessness and emerging forms of postwar

[578] Advertisement M-50-2-ABW, 1950, Air Canada Collection, CASM.
[579] Brochure A-545, 1951. Air Canada Collection, CASM. This brochure mentions the "pirate leaders...of the gentle (?) sex—for example Anne Bonney and Mary Read—damsels with hearts of flint and ready dirks." Historian Carolyn Eastman has analyzed masculinity in popular images of pirates; she might suggest that this was an appeal to male readers, especially since this description was accompanied by an illustration of a female pirate wearing gold bangles and bare legs. Carolyn Eastman, "Blood and Lust: Masculinity and Sexuality in Illustrated Print Portrayals of Early Pirates of the Caribbean," in *New Men: Manliness in Early America* edited by Thomas A. Foster (New York: New York University Press, 2011): 95-115.
[580] Erin Mackie, "Welcome the Outlaw: Pirates, Maroons, and Caribbean Countercultures," *Cultural Critique* 59 (2005): 29.

global order.[581] Pirates, cowboys, Robin Hood, and other popular "outlaw" characters also represented individuality, masculinity, and adventure inside increasingly consolidated North American popular culture. Although only part of TCA's sun destination advertising strategy, referring to the Caribbean as the "romantic ports of the buccaneers" referenced a similar spirit of adventure and frontiersmanship, which reinforced both the historicity of the tropics and the still-novel thrills of traveling by air. More than the sophisticated cities of Europe or the familiar-feeling destinations elsewhere in Canada or the United States, TCA's southern destinations were easy fits for popular fictions of freedom such as pirates and outlaws.

Lest the Caribbean appear too wild for the sensibilities of Canadian tourists, these promotions often also referenced the superficially ordered past of British imperial control. One set of bifold brochures, co-produced by the Bermuda Trade Development Board, claimed that St. George "retains its unspoiled, seventeenth century heritage" and suggests that "if old buildings interest you, you'll want to see" a church built in 1619 and the Sessions House in Hamilton, "the second oldest Parliament in the British Empire."[582] Here the imperial legacy in the Caribbean existed "unspoiled" in its "seventeenth century" form, unpolluted by modern technological systems and urbanization, and perhaps also by the decolonization and civil rights conflicts brewing elsewhere in the world.[583] The infrastructures of pre-twentieth century empire such as

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[581] On global order, law, and the "pirate spectres," see Amedeo Policante, *The Pirate Myth: Genealogies of an Imperial Concept* (New York: Routledge, 2015), 185-189. "Pirates of the Caribbean" in particular has received some recent attention from scholars due to the popular movie franchise. See Anne Petersen, "'You believe in Pirates, of Course...': Disney's Commodification and 'Closure' vs. Johnny Depp's Aesthetic Piracy of *Pirates of the Caribbean*," *Studies in Popular Culture* 29:2 (2007): 63-81, who is especially interested in the consumptive aspects of Disney's marketing of the franchise.
[582] Brochures Adv. 576B and 576C, July 1950, Air Canada Collection 005.005 Box 1, CASM.
[583] It goes without saying, but it was seventeenth-century Europeans and their descendants who did most of the "spoiling."

roads, churches, government buildings, and mills factored heavily in TCA's "old world" descriptions and depictions of the Caribbean. For example, Barbados was assigned "the loveliness of the almost-English landscape" and "good roads."[584] Juxtaposing the order of roads and churches with the disorder of lawless pirates and the exoticism of the tropics with familiar symbols of the "old world" and its empires created a discursive Caribbean that swung about wildly through history but still existed squarely in a specific past rooted in colonial order.

Manipulating time on the scale of historical eras connects to the broader idea of "island time": the idea that time behaves differently on islands, especially those relatively isolated from the mainland. Although there has not been any major academic study of this phenomenon in general, scholars interested in place, space, and mobility occasionally engage with it in its place-based contexts. Architectural scholar Karla Caser has argued, for instance, that the idea of "living on island time" has been used as both a temporal and spatial strategy by residents of Port Aransas, Texas, to build a shared sense of place and belonging. She argues that "island time" is perceived on the island as a balm for the "temporal flux" inherent in modern living, and that residents who chose to move there believed themselves to have made a conscious choice to "slow down."[585] She also suggests that living on island time is a sensory experience; sight, touch, smell, and especially sound (such as "ocean breezes") are all necessary parts of the island time experience. They represent and create a scaffolding for—in the case of TCA's southern

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[584] Brochure A-545, 1951. Air Canada Collection, CASM.

[585] Karla Caser, "The Design of the Built Environment and Social Capital: Case Study of a Coastal Town Facing Rapid Changes," in *Sustainability and Communities of Place* edited by Carl A. Maida (New York: Berghahn Books, 2007), 207. For the Canadian context, see Graeme Wynn, "Museums, Laboratories, Showcases: Prince Edward Island and Other Islands in Environmental History," in *Time and a Place: An Environmental History of Prince Edward Island*, edited by Edward MacDonald et. al. (Montreal and Kingston: McGill-Queen's University Press, 2016), 36-58.

services—the physical and cultural tourism infrastructure separate from "a modern built environment that lacks sensory stimuli other than the visual."[586] TCA's sun-seekers were not *living* in these island places, but only visiting them, which made their forays into the change of tempo produced by "island time" all the more dramatic.

It also matters here *which* island places TCA was selling. It, after all, flew to Vancouver, Montreal, Toronto, and Manhattan islands and to the United Kingdom, but did not engage with island discourse in advertisements for these destinations.[587] The Caribbean, more than any other islands, have historically been perceived as having a uniquely nuanced relationship with time. In his work on Latin American and Caribbean literature, Rudyard Alcocer argues that this is largely due to how the region was constructed inside imperial discourse. "Progress," he suggests, was a phenomenon that appeared to only occur elsewhere, and Latin America and the Caribbean were framed as "existing for the benefit of the metropolis." Because of the region's reputation as a backwater, apparently stuck in the past, time travel in Latin American literature was a way to get history moving again in an attempt to "rewind the clock and undo" the aftereffects of imperialism.[588] Alcocer argues that the Caribbean "seems to flout the linear 'clock time' associated with modernity, thereby allowing the past and the present to commingle."[589] The overlapping diasporas, including the legacy of slavery, and the "get away from it all" tourism

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[586] Caser, "The Design of the Built Environment," 208.
[587] British Columbia's island culture has received some attention from scholars. See J. I. Little, "Views from the Deck: Union Steamship Cruises on Canada's Pacific Coast, 1890-1958" in Bradley et. al., eds., *Moving Natures*, 203-228 and Phillip Vannini's ethnographic work on ferry mobility, such as *Ferry Tales: Mobility, Place, and Time on Canada's West Coast* (New York: Routledge, 2012).
[588] Rudyard J. Alcocer, *Time Travel in the Latin American and Caribbean Imagination: Re-Reading History* (New York: Palgrave MacMillan, 2011), 8. Alcocer is working with the Spanish parts of Latin America and the Caribbean, so he is particularly interested in the Conquest, but similar arguments could be made for the British Caribbean.
[589] Alcocer, *Time Travel*, 68.

literature still popular in the 21st century all contribute to the Caribbean's "highly charged and sometimes peculiar relationship with temporality."[590] Although Alcocer examines this relationship through late-twentieth-century literature *from* and *about* the region, his arguments about authors using time travel to grapple with and/or reverse the effects of empire can be flipped in tourism discourse from the British world. Instead of time traveling in order to erase the legacy of empire, perhaps tourists from Britain or Canada might time travel in order to experience that legacy firsthand. This built on imperial nostalgia in general, but also on nostalgia for a pre-modern pace and a pre-modern place, where the speed of mid-century technological systems had not yet corrupted the relationships between space, place, and time.

One of the implications of framing the Caribbean in this way in Canada is that it rode the wave of mid-century nostalgia for a colonial past responsible for the establishment of what might be called "Canadian values."[591] Nostalgia is a key part of the modern industrial experience, allowing, as historian Alla Myzelev has recently claimed, "individuals to mitigate the modern condition of loss of individuality, rigidity, and increasing mechanization" through a "longing for stability, for certainty of opinions and conditions of life that modernity refuses because of...large-scale industrial development, rapid changes in technology and the need or desire to relocate."[592] Canada's relationship with its colonial past and its continued legacy of settler colonialism give texture to this nostalgia, as it occupies a liminal space between center and periphery. In his recent book on Canadian living history museums, Alan Gordon argues that the proliferation of "pioneer

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[590] Alcocer, *Time Travel*, 67.
[591] In 2016, candidate for the federal Conservative Party leadership Kellie Leitch proposed screening potential immigrants for what she called "Canadian values." Leitch and her proposal were widely criticized as anti-multicultural and pandering to the extremist tendencies of American national politics.
[592] Alla Myzelev, *Architecture, Design, and Craft in Toronto 1900-1940: Creating Modern Living* (New York: Routledge, 2017), 71-72.

village museums" through the mid-twentieth century was driven by "a need to cope with the onslaught of modernity through nostalgia" while building a rooted genesis "associating the prosperity of the present with the actions and values of those imagined to be the first" settlers.[593] Museums such as the Fortress of Louisbourg in Nova Scotia and Upper Canada Village in Ontario recreated performative settler colonialism in a way that emphasized material culture—industry, handicraft, energy—and the perceived hardships and ingenuities of settler life.[594] Starting in the 1920s, the "Arts and Crafts" architectural movement found its footing in large cities such as Toronto, referencing an architectural and artistic style that skipped right over Canada's colonial past and tied it to "the Gothic and vernacular traditions of Old England."[595] This version of nostalgia conflated time and space, since there is no analogous "Old Canada" to provide architectural inspiration.

Referencing Barbados' "good roads," or the fact that it was "known as 'little England' because of its scenery and traditions" took this even further, suggesting that going to another place could feel like going to another time that progressed through history at a slower pace, if it progressed at all. Time in the Caribbean moved in a different way than it did elsewhere, and therefore TCA's southern destinations had yet to burst into the modern world. On the air route map the airline distributed to its passengers through the mid-1950s, TCA claimed that "the story-book villages [of Bermuda] dating back to Elizabethan times contrast pleasantly with the bustle

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[593] Gordon, *Time Travel*, 111, 114. For more on the "genesis complex," see Paul Litt, "Pliant Clio and Immutable Texts: The Historiography of a Historical Marking Program," *Public Historian* 19:4 (1997): 7-28.
[594] I learned to card wool, quilt, make dipped and rolled candles, and work with tin on school trips to Upper Canada Village as a girl. Both Louisbourg and Upper Canada Village opened to the public in the early 1960s.
[595] Myzelev, *Architecture, Design, and Craft in Toronto*, 68.

of the mainland."[596] TCA was clearly working inside established place-images and time travel tropes, and it had no qualms with contrasting the modern world with the British colonial-ness of its southern destinations. The combination of these features turned TCA's southern destinations into what Anne McClintock has called "anachronistic space." Tied to the Victorian-era compulsion to collect, reproduce, and display the historical and archeological record, high imperial powers imagined traveling through their holdings as traveling through time. "Geographical difference across *space* is figured as a historical difference across *time*," building physical journeys between center and periphery into colonial progress narratives. McClintock uses this analytic largely in its Victorian context, as she is concerned with how this construction of time figured into race, gender, and the project of empire, but TCA building the Caribbean into a quasi-colonial respite from the stresses of modern living proves the flexibility of this concept. Rather than claiming that Africa, for example, was "abandoned in prehistory at the precise moment before the...Reason manifested itself in history," spaces in the Caribbean existed at a point in history that Euro-Canadians might actually want to revisit.[597] The North Star became a magic carpet, transporting passengers across time and space to a place that existed outside the accelerating pace of history quickly becoming part of the modern experience. As one promotional brochure for Bermuda, distributed by direct mail, travel agents, and the seat-back pockets of North Stars starting in late 1948 asked:

> "Tired? Jaded? Weary of the treadmill? Jangled by the turmoil of the world? Come, escape from it all! Step aboard a T.C.A. plane and fly to sanctuary in

[596] Brochure Adv. 555, November 1954, Air Canada Collection 005.005. Box 5, CASM.
[597] Anne McClintock, *Imperial Leather: Race, Gender, and Sexuality in the Colonial Contest* (New York: Routledge, 2013), 40-41

> Bermuda. In a few hours you'll be a new person in a new land...Life moves at an easy pace in Bermuda...Explore the islands...by boat or bicycle, by horse and carriage, or by the small motor cars now admitted to paradise but not allowed to spoil it by speed."[598]

The choppy opening interjections here are onomatopoeic, jangling the reader until they are soothed by Bermuda's "easy pace." More notably, though, the enemy of paradise was constructed as technological speed, the grand harbinger of modernity. Technological modernity made daily life appear to speed up, and therefore Bermuda, "although not completely unmechanized," as one newspaper columnist claimed in 1953, "still retains the spirit of the long-dead past. Life on these...islands is still as easy and uncomplicated as it was in our father's time."[599] The irony was, of course, that the North Star was the only way for most everyday Canadians to vacation in "paradise." Only the most modern of transportations could act as a time machine on such an extreme scale. This was especially noticeable when the North Star appeared pictorially in advertisements, as it often did in those designed for newspapers of magazines (rather than standalone brochures, where it was usually featured on its own page or panel). It was frequently contrasted with pre-modern transportations such as the horse and buggy, creating a visual language of technological time travel.

TCA's Caribbean destinations were made anachronistic not only by the descriptions of their landscape and architecture, but also by widespread use of long-established stereotypical place-images that homogenized the Caribbean and flattened its history. Thus far, I have deliberately treated all of TCA's southern destinations as homogenous in keeping with my sources. Although TCA did frequently deal with Bermuda, Nassau, Barbados, Jamaica, and

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[598] Brochure "TCA to Bermuda," November 1948, Air Canada Collection 005.003, CASM.
[599] "Bermuda, Britain's Oldest Colony is World Vacation Paradise," *Crossfield Chronicle* (Alberta), June 8, 1953, 10.

Trinidad separately in its literature, the language and images associated with each were only marginally different. Barbados was tied to the pastoral British countryside more than other destinations. Descriptions of Jamaica more frequently referenced pirates, and Trinidad's mixed diasporas—"East Indian bazaars, Hindu temples and Moslem mosques"—were its main selling point, but the general rhetoric of sun, sand, and color carried across each destination.[600]

This was because TCA relied heavily on the same Caribbean tropes that had been in use since the late nineteenth century. Historian Krista Thompson has shown that island elites who had a stake in tourism, such as merchants and hoteliers, deliberately established a set of stock images, including donkeys, women wearing baskets on their heads, and native islanders dressed in British clothing, that was universally used to define the British Caribbean. They reduced the complexity and diversity of the islands to a set of common visual tropes which represented Caribbean-ness to a wide audience. Even then, those images "were only realistic inasmuch as they were consistent with travelers' dreams of the tropics" and represented an imagined Caribbean picturesque.[601] Although Thompson is concerned with the last two decades of the nineteenth century and the first few of the twentieth, every place-image she mentions appeared often in TCA's promotional material. In a random selection of 35 TCA newspaper advertisements for the Caribbean between 1949 and 1953, for example, horse-drawn vehicles (including pack donkeys) appear in nine and smiling natives, one of which is dressed like a British bobbie and six of which are women holding baskets on their heads, appear at least 11 times. Even the beach, which is probably TCA's most repeated visual cue that travelers were going to the tropics, is described by Thompson as "another tamed aspect of nature," on par with

[600] Despite all that mixing, Trinidad remained "paradoxically British in character." Brochure Adv. 44310, January 1954, Air Canada Collection 005.005 Box 5, CASM.
[601] Thompson, *An Eye for the Tropics*, 21.

plantations or paved roads as representative of colonial order and power over nature.[602] Travel posters and brochures, in which copy and hard-sell information were often secondary to eye-catching visuals, made use of these images even more heavily. Not only was TCA evoking a Caribbean picturesque in its promotions, but it was evoking a historical picturesque that further served to keep the Caribbean mired in time.

If women carrying baskets and donkeys carrying saddlebags were the place-images of the tropics, the North Star was the mobility-image, so to speak, that flattened the experience of travel. The North Star was often drawn more photo-realistically than the destination, and was sometimes the photographic element of mixed-media style advertisements, making it appear even more modern and "new" than the stylized beach scenes and colorful flowers below. Photographs or photo-realistic illustrations of the North Star were meant to create brand recognition and develop immediate associations between the destination and the only method by which Canadians could reasonably get there inside their two-week vacations. "Quick identification with TCA," claimed McLauchlin about the 1951 campaign featured in Figure 9, "is attained through the use of a line drawing of a 'North Star' which leads the reader from the headline...directly to the invitation to 'Fly TCA.'"[603] Advertising campaigns for European destinations in the same period tended to show the North Star flying by itself without any scenery below, or parked on the taxiway where stylish passengers could embark and debark. This normalized the North Star; McLauchlin argued in one 1951 memo that showing the North Star in flight or on the runway would "suggest that flying to Europe is a normal method of

[602] Thompson, *An Eye for the Tropics*, 7.
[603] Memorandum by Donald S. McLauchlin, "Bermuda/Caribbean/Florida—Fall 1951," 28 November 1951, Air Canada Collection, CASM.

transportation."[604] When selling sun destinations, though, the North Star had to remain magical, easily accomplished by mixing illustration styles and contrasting the sleek, modern aircraft with the backwards-seeming transportations and people on the islands. "So conventional was the association of the photograph with a sense of the 'new'" advertising historian Roland Marchand has suggested, "that 'before and after' parables of historical progress—in product improvement or in ways of doing things—typically contrasted a pen drawing of the 'old' with a photograph of the 'new.'"[605] Like the "toboggan" series of advertisements featured in FIGURE# and the transatlantic timelines of Chapter 1, the North Star lorded over technologies of the past, especially horse- or donkey-drawn vehicles.

Two newspaper advertisements from TCA' first Caribbean campaign in 1949 make this connection obvious. In one, with the tagline "Find Summer Again in Beautiful Bermuda," a North Star flies over a typical-looking street scene. Tourists heading to a sailboat marina and a bicycle leaning against a building provide the background for a pair of tourists lounging in a horse-drawn carriage piloted by a dark-skinned man in a top hat. A wrought-iron lamppost with a colonial-era cannon at its base draw the eye to the claim of "LOW FARES from Montreal. $153.00 Round Trip (plus tax)."[606] The melange of transportations—sailboat, carriage, bicycle—and of eras—the cannon, electric light, clearly visible Bermudan flag, and female tourist in her modern hairdo and two-piece bathing suit—only makes sense when under the gaze of the time-traveling North Star. The other, which implores the reader to "Fly TCA to the blue Caribbean's Winter Holiday Havens," features no tourists, but instead shows three Caribbean natives. The

[604] Memorandum by Donald S. McLauchlin, "Trans-Atlantic Advertising—Fall 1951," November 5, 1951, Air Canada Collection 005.005 Box 2, CASM.
[605] Marchand, *Advertising the American Dream*, 150.
[606] Advertisement M-49-4-AB, 1949, Air Canada Collection, CASM.

specific setting of the image is unclear, since Nassau, Jamaica, and Trinidad were all advertised destinations. A donkey-drawn cart sits immediately under the "Air Lines" part of TCA's signature, as if to show the superiority of one over the other, and the dominant image in front is of a woman wearing a full skirt and balancing a basket on her head, haloed by a lush palm tree (Figure 12).[607] The position of the donkey cart as what Thompson calls "a 'primitive' sort of locomotive," or in this case, aircraft engine, and the woman's broad smile point "further to the island's premodern status and stasis"; the same techniques used in turn-of-the-century postcards to keep the Caribbean stuck in the past seeped into advertisements for southern vacations half a century later.[608]



Figure 12: "Fly TCA to the blue Caribbean's Winter Holiday Havens," 1949.

In constructing its southern destinations as places where both time and history moved more slowly, TCA

[607] Advertisement M-49-4-AW, 1949, Air Canada Collection, CASM. Thompson tells the story of Lizzie Anderson, a Bahamian woman who was featured in a popular turn-of-the-century postcard carrying a basket on her head. The postcard and image were so iconic that her death in 1908 was reported in local white newspapers. The woman in this advertisement is eerily similar, showing the longevity and saturation of these place-images. Thompson, *An Eye for the Tropics*, 259.

[608] Thompson, *An Eye for the Tropics*, 116.

created a contradictory set of associations between history, technology, time, and mobility. "Island time" meant that the Caribbean remained stuck in the past, where the British colonial legacy was felt more acutely than in Canada, where primitive-seeming "Eastern" customs prevailed, and where technological modernity had not yet taken root. On one hand, the Caribbean became even more "backwards," existing permanently in the past like a living history museum. On the other, that backward-ness was sought out by "jangled" Canadians as a respite from the pace of the modern world. Nostalgia mixed with the Caribbean's status as a place-out-of-time to support TCA's self-fashioning as a purveyor of time travel and time travel machines. Time travel could both bolster the modern experience, since TCA's aircraft did an excellent job of shrinking the nation and bringing exotic faraway places inside the range of the two-week vacation, but could also help passengers get away from modernity should they so choose. The most widespread type of time travel in TCA's public-facing material, however, engaged with choice and control over time in yet another way by disconnecting *seasons* from *months* and making it possible to delay or skip over the experience of Canadian winters, however necessary they may have been to Canadian national identity.

"Step into Summer This Winter": Climate, Mobility, and Seasonality

In the Canadian context, the Caribbean was both a respite from the pace of the modern world *and* a break from climatic extremes back home. In order to be comfortably constructed as such, the region had to undergo a radical discursive transformation from what historian Philip Curtin describes as "death by migration" to a healthful, healing picturesque.[609] Early modern

[609] Philip D. Curtin, *Death by Migration: Europe's Encounter with the Tropical World in the Nineteenth Century* (Cambridge: Cambridge University Press, 1989).

science and medicine painted hot climates as inherently dangerous to European constitutions and bodies, which were believed to survive best in in climates like those of Britain or France. This "fear of hot climates," as historian Karen Kupperman called it in her 1984 survey article of this phenomenon, was revived in the eighteenth and nineteenth centuries as part of the neo-Hippocratic climatic imperialism that inspired the Canada First Party and other climate nationalists in North America.[610] Eighteenth and nineteenth-century European settlers in places such as the Caribbean, India, and Africa were prescribed a variety of correctives to effects of climate, including climatic furlough in Europe and healing "hill stations" and spas in the colonies.[611] Those spas eventually became destinations in their own right, and a burgeoning tourism industry based around health pilgrimages took root. The West Indies especially were reframed as such in the nineteenth century through images that showed colonial power over nature and subsequently power over the potentially deleterious effects of the climate. These images focused on an ordered exotic, such as banana plantations, coconut groves, and "civilized" natives, and framed the tropics as a domesticated, naturalised, tropical, colonial space, allowing tourism stakeholders, including large corporations such as the United Fruit Company, to shift the narrative towards pleasure travel.[612] As tourism historian Frank Fonda Taylor has shown, regions known for their detrimental health conditions, such as malarial-swamp-adjacent "Hellshire Hills"

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[610] Karen Kupperman, "Fear of Hot Climates in the Anglo-American Colonial Experience," *The William and Mary Quarterly* 41:2 (1984): 213-240.
[611] Jennings, *Curing the Colonizers*.
[612] Thompson, *An Eye for the Tropics*, 5-7. For more on the development of southern tourism, see Catherine Cocks, *Tropical Whites: The Rise of the Tourist South in the Americas* (Philadelphia: University of Pennsylvania Press, 2013); James W. Martin, "The United Fruit Company's Tourist Business and the Creation of the 'Golden Caribbean', 1899-1940," *Journal of Historical Research in Marketing* 8:2 (2016): 263-283.

in Jamaica, were being re-interpreted as "Healthshire Hills," or "playgrounds for itinerant Caucasians in search of health and enjoyment" by the turn of the twentieth century.[613]

Historian Mark Carey has recently lamented that analysts have largely ignored the climatic aspects of the transformation from Hell to health, which is surprising given that "the region has become one of the world's most iconic destinations for climate-related tourism."[614] He ties the shift to four major developments through the eighteenth and nineteenth centuries: geographic nuancing of climatic conditions by those living in the Caribbean instead of scientific elites in Europe, the "Europeanization" of living conditions and quotidian lives of settlers, new understandings of tropical medicine, and increased steamship access, which boosted the tourism industry and "helped turn the Caribbean climate into a commodity."[615] Despite taking place long before TCA flew its first North Star to Bermuda, the process by which Bermuda and the Caribbean became salubrious vacation spots is important here for two major reasons. First, like Canada, the climate of the Caribbean has been culturally constructed by settlers, and second, this commodification took place as modern communications technologies were driving a wedge between place and time. At the same time that the Canada First Party was discursively transforming the racial heritage of settler Canadians to fit their climates, tourism boosters in the Caribbean were re-framing the climates there to fit the needs of pleasure-seeking visitors. This shows both the malleability and the fragility of envirotechnical constructions, especially as modern technologies—in their first wave at the end of the nineteenth century and in their postwar iteration—threatened to rob place of its meaning.

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[613] Frank Fonda Taylor, *To Hell with Paradise: A History of the Jamaican Tourist Industry* (Pittsburgh: University of Pittsburgh Press, 1993), 4.
[614] Mark Carey, "Inventing Caribbean Climates: How Science, Medicine, and Tourism Changed Tropical Weather from Deadly to Healthy," *Osiris* 26:1 (2011): 131.
[615] Carey, "Inventing Caribbean Climates," 138.

TCA's response to this threat in its public-facing sun destination material was to replace a place-based foundation for climate with a time-based one. Canada became a "winter" place and Bermuda, Florida, and the Caribbean became "summer" places. This was not a new treatment. Early modern settler accounts of the region occasionally compared European seasonal temperatures with those they found elsewhere. Christopher Columbus, for example, allegedly originated calling the Bahamas the "isles of June," connecting place with time. The Bermuda island groups too had long been referred to as the "summer islands," and one early seventeenth-century account claims of the climate that "noe cold ther is beyonde an English Aprill, nor heate much greater than a hott July in France."[616] Similar accounts from Barbados claimed it to be "as Coole, and temperate, as in Hollande in Summer time," and "not so hot as Spain in the dog days."[617] European seasons were the metric by which the climates of the Caribbean, as well as other imperial holdings, were measured.[618] These comparisons performed a variety of discursive jobs in European and Euro-American travel narratives, as they were measurements audiences

[616] It is also likely that "Summer" here is a bastardization of "Somers," the name of the British admiral tasked with building the Bermudian colony in the early seventeenth century. Still, though, the seasonal meaning of the name has not gone unnoticed by tourism boosters. J. H. Lefroy and Nathaniel Boteler, *The Historye of the Bermudaes or Summer Islands* (London: Haklyut Society, 1882), 9.

[617] Quoted in Larry Dale Gragg, *Englishmen Transplanted: The English Colonization of Barbados, 1627-1660* (New York: Oxford University Press, 2003), 16. Gragg calls the contradiction between scientific theory and lived experience "intriguing" and suggests that it was because settlers were keen to attract more settlers. However, as Joyce Chaplin has shown in her accounts of early American settlement and science, the everyday experiences of settlers *often* contradicted what scientific elites in Europe expected to take place. See Joyce Chaplin, "Natural Philosophy and an Early Racial Idiom in North America: Comparing English and Indian Bodies," *The William and Mary Quarterly* 54:1 (1997): 229-252.

[618] Of course, "April," "July," "June," and even "summer" are European constructs. Anthropologists have shown that there is no innate need to divide the year into four seasons or twelve months. Ben Orlove, "How People Name Seasons," in *Weather, Climate, Culture*, edited by Sarah Strauss and Ben Orlove (New York: Berg, 2003), 121-140.

would recognize and could also help fold exotic places into European grids of reason.[619] In the Enlightenment context, this was a subtle way of claiming these territories for Europe by placing them inside European ways of understanding and measuring the natural world.

In the age of steam, however, connecting places to seasons became an expression of the modern experience. The Caribbean's climatic constructions owe much to the ability of steamships to compress time and space, since they facilitated tourism by European and Euro-American visitors. Tourism to the Caribbean has been tightly tied to British and American imperialism, since steamships transported both tourists and freight. Just as aviation would through the twentieth century, historical geographer Barney Warf has shown how "the steamship ushered forth a variety of cultural and ideological discourses centered on how small the world was becoming" in terms of both the movement of human beings and freight.[620] Steam made spaces shrink and time accelerate. Physical distances were increasingly seen as synonymous with travel times as oceans—those great separators of Old World and New—appeared to dwindle down to nothing. At the same time, those distances were becoming too large for travelers to comprehend, as people, mail, and freight moved across seemingly unmanageable space at unimaginable speeds. Time, as I have already shown, subsequently became a readily available and easily understandable stand-in for distance. Attaching months and seasons to specific places could be seen as a natural outgrowth of this phenomenon whereby faraway exotic places were both months and miles away. Popular turn-of-the-century travel narratives, such as Charles

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[619] James Duncan and Derek Gregory go so far as to suggest that arbitrarily dividing the world into continents is part of this projection. James Duncan and Derek Gregory, editors, *Writes of Passage: Reading Travel Writing* (London: Routledge, 1999), 5. See also Sheller, *Consuming the Caribbean*, 107-109.

[620] Warf, *Time-Space Compression*, 110. For a concise history of steam and world-shrinking, see 103-110.

Stoddard's *Cruising Among the Caribbees*, claimed that steamships allowed for "the wonderful transition from winter to late spring" after a week at sea, transforming February into "a moist June morning."[621] American writer Hezekiah Butterworth's description of the Bahamas in his *Zig-Zag Journeys* series for youth employed a jumble of the Caribbean picturesque, Columbian discourse, conflating distance and time, and the miracle of steam:

> "The Isle of June,—an island where every month of the year is June, and where January is the June of the North!...The passengers who leave New York in the Ward line of steamers on Thursday afternoon for the Isle of June may dine on Sunday amid the groves of cocoanuts and farms of pineapples...The distance from midwinter to midsummer is very short on such an excursion to the Isle of June."[622]

The disorienting effect of the ocean liner's speed, at least compared to previous transportations, made the journey from north to south feel like a journey from one season to the next, suggesting that travel times, especially to tropical places, could be measured in months as well as hours.

By the postwar period, tropical vacations were being re-imagined through this lens of modernity, time, and space, with the added time-based framework of the "two-weeks" vacation. The restorative health benefits of these places did not entirely disappear—one of TCA's first Bermuda brochures claimed that "there is health in the bright sun and the clear air and the salt sea is a tonic"—but they were sublimated inside the larger North American rhetoric of leisure and control over time.[623] What emerged in the Canadian context was a new type of control over time that pulled some of the more stubborn elements of tropical healing into constructions of

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[621] Sheller, *Consuming the Caribbean*, 60. Charles Stoddard, *Cruising Among the Caribbees*, (New York: Scribner, 1903), 14-19.
[622] Hezekiah Butterworth, *Zig-Zag Journeys in the Sunny South: Vacation Rambles in Southern Lands* (Boston: Estes and Lauriat, 1887), 255-256.
[623] Brochure, "'North Star" Sky Tours to Bermuda," October 1948, Air Canada Collection 005.003, CASM.

Canadian geographic and climatic identity by suggesting that travellers could choose which seasons out of the year they might experience at a particular time. There was an inherent contradiction between celebrating Canada's constructed climate, especially its apparently harsh character-building winters, and eagerly boarding an airplane to spend those winters elsewhere, and that contradiction was further elevated by TCA's deliberate deployment of its southern routes to balance low wintertime traffic. The airline, then, had to carefully build a discourse of winter vacations that did not disparage Canadian winters too much. They had to seem uncomfortable enough to want to escape for a while, but not so miserable that they could be abandoned entirely without remorse. TCA's solution to this problem was to continue discussing travel to its southern destinations in terms of time, but on a scale separate from the two-weeks vacation or the historical break from modernity. Sun destinations became "summer destinations," where Canadian winters could be replaced at will with conditions that felt like Canadian summers. By exchanging January for June, instead of one type of January for another, passengers might be able to retain the special status of their Canadian Januaries and also keep aviation as a source of technological nationalism.

The substitution of seasons for places performed a variety of important tasks at TCA. For example, the airline occasionally got into the Columbian spirit, equating the explorer's "precious landfall in 1494" at Jamaica with what "*you* will discover" when you travel there by TCA; the fact that those discoveries included "a charming and hospitable British colonial environment" tied this to the time travel described above.[624] Furthermore, assigning "eternal June" to the Caribbean was another subtle way to keep the region stagnant in time, preventing it from moving

[624] Brochure 160/6/49, 1949, Air Canada Collection 005.003, CASM.

through the seasons and subsequently preventing history from moving forward.[625] More obviously, the airline used the discourse of months and seasons to remind passengers that the Caribbean was a summer place in much the same way Canada was a winter place, implying complementarity. Coverage of early flights to the Caribbean described going "from pines to palms," and "leaving galoshes and mufflers in Montreal or Toronto" in favor of "silver beaches," drawing connections between clothing and landscapes as well as seasons and places more generally.[626] One 1950 magazine advertisement suggested that "a swim, a sail, or a seaside siesta—you name your holiday pleasure—it's yours in hours when you take a TCA North Star Skyliner south were miles of sunlit beaches beckon and it's always 'June in January.'"[627] However, it was January in Bermuda or Florida, just the same as it was in Toronto or Montreal. Turning Florida, Bermuda, and the Caribbean into the "lands of eternal summer" drew on a long tradition of travel narratives that transformed the space-shrinking abilities of modern transportation into seasonal time travel filtered through European and Euro-American lenses.[628]

This rhetoric was especially resonant in the Canadian postwar air travel context for two reasons. First, seasons, or at least culturally homogenized versions of them, were part of

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[625] Alcocer suggests that time displacement in Latin American and Caribbean literature serves to jump-start history without the influence of conquest. European discourses keeping the islands in "eternal June" deliberately preserved a more desirable colonial past. Alcocer, *Time Travel in Latin American and Caribbean Imagination*, 7-10.

[626] "TCA Goes to the Caribbean," *Between Ourselves*, January 1949, 4. Catherine Cocks has written extensively on the performative aspects of changing clothes when traveling south in the early twentieth century. Cocks, *Tropical Whites*, 96-124.

[627] Advertisement 12072, 1950, Air Canada Collection, CASM. It is possible that the "June in January" in quotes was a reference to the 1934 Bing Crosby song of the same name. I cannot find any other popular culture references that might warrant that phrase being in separate quotes.

[628] Pun absolutely intended, since the "picturesque" continued—and continues—to operate inside the tourism imaginary. Derek Gregory, for instance, argues that nineteenth-century British travelers were "shocked by the uncanny familiarity," insofar as it fit their perceptions of the picturesque, of the Kandyan Highlands in "Dis-Orientation: On the Shock of the Familiar in a Far-Away Place," in *Writes of Passage*, eds. Duncan and Gregory, 151.

environmental nationalism. Canadian winters—or, rather, Januaries—had a special cultural significance. Second, the airplane could do much more damage, so to speak, to the construction of Canada as a winter nation than steamships could. Because they were faster and increasingly more accessible, especially after the rise of the two-week vacation, more Canadians, especially those far distant from the ocean, could imagine themselves using airliners to leave Canadian winters behind. By bringing Florida, Bermuda, and the Caribbean closer to Canada, TCA's aircraft had the potential to take everyday Canadians away from their season-based identity.

Unlike the much subtler construction of Bermuda and the Caribbean as a place out of history, the airline made obvious attempts to remind its passengers that sun destinations could whisk them away from winter. Rather than being hinted at by place-image, or rhyming slogan, time travel on the level of seasons was displayed in bold uppercase letters as part of advertising headlines or as the titles of brochures and was woven explicitly throughout advertising copy. I have already discussed a number of such campaigns, such as the "Have the Summertime of your Life this Winter" series (Figure 9). That particular headline "conjures up a picture and invites action," wrote McLauchlin, and that action was for the reader "to identify himself or herself with the common urge to escape winter by holidaying—via TCA—in the sunny south."[629] The desire here was not to get away from *Canada*, but to get away from *winter*. Seasons, not places, were what the airline was in the business of selling; the relationships between seasons, calendar time, and place were rearranged in new ways with the help of TCA's North Stars without entirely displaces earlier envirotechnical visions. Take, for example, the 1949 newspaper advertisement selling the "blue Caribbean's Winter Holiday Havens" pictured in Figure 12, which mixed up

[629] Memorandum by Donald S. McLauchlin, "Florida/Bermuda/Caribbean Advertising—1951," 19 November 1951, Air Canada Collection, CASM.

and repeated the names of seasons in its opening claim that passengers could "wing your way from Winter into Summer on a luxurious TCA 'North Star' Skyliner to the storied West Indies offering endless winter holiday attractions with swimming, sunning, sailing, golf and other summertime activities."[630] Winter and summer each appeared twice, and somehow swimming, sunning, sailing, and golf could be both "winter holiday attractions" and "summertime activities." It clearly was less about places and more about times, as these varied destinations become the singular "storied West Indies" and a single season: summer. Turning all of Florida, Bermuda, and the Caribbean into "summer islands" was the most prevalent seasonal time-travel strategy at TCA because it could support time travel on the other two scales.[631] Other newspaper advertisements, for example, suggested that TCA sold "your ticket to summer," or that "summer's only hours away"; again, the North Star became a time machine able to stretch and shrink hours, transport travellers to a colonial past, *and* allow them to jump seasons at will.[632]

Florida gradually became the central piece of this program. First, unlike Bermuda and the Caribbean, it could not be constructed as a place out of time on the scale of years and was therefore exclusively a place of eternal summers. Second, Florida was eventually by far the most popular "sun destination" for Canadians traveling by air or by automobile; Florida came to dominate warm-weather-winter-vacation discourse in general by the 1970s. TCA did not begin flying to Florida until April 1950, two years after its inaugural flight to Bermuda, and airline executives therefore had a clearer picture of how Canadians would take to this new destination. As was the case with Bermuda, however, a springtime start date was cause for concern at the

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[630] Advertisement M-49-4-AW, 1949, Air Canada Collection, CASM.
[631] Advertisement M-49-1-ABW, 1949, Air Canada Collection, CASM.
[632] Advertisements M-50-4-ABW and M-50-3-ABW, 1950, Air Canada Collection, CASM. Interestingly, the French-language version of the first advertisement was translated to "TCA vous apporte l'ete," or "TCA brings you summer."

Advertising department as well as the airline at large. The introductory campaign for the new twice-weekly flights to Tampa/St. Petersburg was purposefully "minor," as Bythell claimed in late March 1950, concentrating mostly on "'announcement' type of advertising" and limiting its markets to Toronto, Montreal, and Ottawa newspapers.[633] The Advertising department was not terribly interested in selling Florida to springtime and summer travellers, especially when compared to the equivalent campaign from the winter of that year. The two 500-line newspaper advertisements use the exact same illustration of a woman wearing a polka-dot bikini and holding a beach ball with a North Star flying nearby, and they both refer to Tampa/St. Petersburg as the "heart of Florida's winter vacation land." However, the two advertisements clearly reflect the airline's priorities and the ways in which Florida fit inside the rhetoric of sun destinations and time travel (Figure 13). The "announcement" advertisement ran three times in Montreal and Toronto newspapers and twice in Ottawa, with the simple headline: "Announcing Direct Flights to Florida by TCA." The winter advertisement, on the other hand, ran twice in Toronto, Ottawa, Hamilton, London, Windsor, and Montreal newspapers with the much more evocative "Follow the Summer Sun[:] Fly TCA to Florida."[634] In this version of the advertisement, the woman's beach ball almost becomes the sun with an illustration of the North Star, the word "Florida" in the headline, and her shirtless male companion all caught up in its orbit. Florida might be a "winter holiday land" in the winter advertisement, but it was also a place where Canadians could

[633] Because those twice-weekly flights were from Toronto and Montreal, as were all "sun destination" flights in this period, promotional efforts were largely limited to southern Ontario and Quebec newspapers and nationally-circulated magazines. However, this campaign was especially limited. Memorandum by D. C. Bythell, "Advertising—New Florida Service," 24 March 1950, Air Canada Collection 005 Box 1, CASM.
[634] Memorandum by D. C. Bythell, "Florida Advertising—Fall Months," 25 November 1950, Air Canada Collection, CASM.

"enjoy the warm sun, the summer fun."[635] Like the airline's first Bermuda campaigns promising both summer pleasures and winter attractions, the seasons were re-configured here so that they were connected with places in ways that reflected mid-century Canadian concerns with time, technology and self-fashioning; following the summer sun—that is, traveling across time—meant that winter was not being replaced in Canadian cultural consciousness.



Figure 13: Advertisements selling Florida service from March (L) and November (R) 1950.

[635] Advertisement M-50-32-S, 1950, Air Canada Collection 001.002, CASM.

Only the most modern travel technologies could allow Canadians to literally follow stars across the sky. The North Star was already constructed as a time machine capable of collapsing travel times, extending vacation weeks, and recreating the colonial experience, but in this context the airplane could completely rearrange the ways time and place might interact with one another. This meant that even though Canadians could access Florida by car and Bermuda and the Caribbean by ship, only the North Star could create an authentic time travel experience. Subsequently, the handful of campaigns co-produced by the Bermuda Trade Development Board have comparatively little of this rhetoric, almost exclusively referring to the "semi-tropical," rather than "summer," islands made accessible by "the magic of air travel."[636] "Semi-tropical," despite evoking a certain climate, is actually a geographic designation, whereas TCA's insistence on referring to these same places as "summer" is explicitly temporal. The airline had a stake in these new relationships between time and place, since sun destinations needed to have a seasonal appeal to Canadian travelers already accustomed to certain types of winter mobility.

This also meant that those Canadian winters could remain discursively intact because passengers were travelling through time, not space. Instead of replacing Canadian winters with some other place's winters, the airline's promotions suggested that Canadian winters were being replaced with Canadian summers, or at least conditions that felt like Canadian summers. Keeping Canadian winters as the yardstick was vital here, since traveling to the Caribbean or Florida had the potential to destabilize the climatic aspects of the Canadian envirotechnical nation. Although this did not crystallize until the jet age, when travel to Florida especially became a part of mass tourism, the strategy of turning sun destinations into "summer destinations" pointed to some of the early anxieties about what might happen to Canadian identity if geography and climate were

[636] Advertisement M-52-15-AW, 1952, Air Canada Collection 005 Box 3, CASM.

displaced by modern technologies. By projecting Canadian climatic conditions onto decidedly non-Canadian places, TCA made it clear that no matter how "magic" their airplanes or services might be, they could never entirely erase Canadian winters. They could not remove the lived experience of winter, nor could they allow Canadians to forget the cultural value of winter because winter was attached to the land itself. Although Carey argues in his work on nineteenth-century models of Caribbean climates that climate "was never conceptualized in simplistic or monolithic terms" since it was bound up so closely with place, TCA turned climates into seasons, and subsequently into times in its Caribbean promotions.[637] The eighteenth and nineteenth-century concept of "micro-climates" such as "hill stations" and the healing waters of mountain spas was replaced in this material with the broadest possible categories of "summer" and "winter" in keeping with modernity's disruption of space, place, and time. By associating climates with times, TCA could reorder the seasons so that Canadian winters were never entirely replaced despite the "sun, sea, and sand" appeal of its southern destinations.

Although the airline did not reorder the seasons deliberately, the scarcity of this rhetoric in Trade Development Bureau collaborations and its ubiquity elsewhere in TCA's public-facing material shows that this strategy was central to how TCA sold itself and its services. This strategy may have worked too well; TCA's large-scale attempt to use their southern destinations as a way to balance winter with summer traffic meant that passengers were deliberately *not* choosing to fly south in the summer. Overall traffic may have appeared more balanced, but TCA Atlantic turned out to be the victim of this overcompensation. The airline began offering special excursion fares over the summer months and advised travel agents in 1951 that "many people are under the impression that the Caribbean experiences extremes of tropical temperatures in the

[637] Carey, "Inventing Caribbean Climates," 132.

Summertime. It does not. The climate...permits vacationists to enjoy all their favorite outdoor sports and recreations every month of the year. Heat waves of 100 degrees or more, such as are experienced in Canada, are practically unknown in the Caribbean." As part of its "all-out promotion" of summer travel to the Caribbean, the Advertising department targeted workers who had reduced hours in the summer, such as teachers, and even released a series of "Temperature of the Week" charts to show that conditions were *cooler* than potential passengers might expect.[638] This was an odd counterpoint to the successful "Bermuda Temperature Gauges" and palm tree displays discussed earlier in this chapter, and it reveals the delicate nature of these climatic constructions. Advertisements for Bermuda, Florida, and the Caribbean released for the wintertime were meant to attract Canadians "away from the snow and cold of winter, to a land of warm sunshine, sparkling water, and soft beaches," as McGee wrote in an October 1953 memo.[639] Summertime promotions, however, were built around the much more utilitarian low fares and package rates.[640] Like the introduction of Florida flights, TCA advertising executives were at a loss as to how to best sell sun destinations in the spring and summer months, but had no shortage of flowery ways to describe the same destinations in the winter. The seasons clearly mattered to the selling of these destinations because the destinations *were* seasons. Whether passengers were following the summer sun to Florida, or experiencing summer activities and winter attractions in Bermuda, they were maintaining the currency of Canadian winters by turning their "sun destination" vacations into a seasonal time-travel story.

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[638] Memorandum by R. E. Deyman, "SALES PROMOTION—60-Day Summer Excursion Fares," 22 March 1951, Air Canada Collection, CASM.
[639] Memorandum by J. A. McGee, "Bermuda/Caribbean Advertising—Canadian Newspapers," November 4, 1953, Air Canada Collection, CASM.
[640] See, for example, memorandum by Donald S. McLauchlin, "Advertising in Canada—60-Day Caribbean Excursions," 21 April 1952, Air Canada Collection 005 Box 3, CASM.

Conclusion

Manipulating hours, weeks, seasons, and years created a jumble of mixed messages at TCA that situated Florida, Bermuda, and the Caribbean as a set of places with a different relationship to time than Canada, but also as a set of places that threatened Canadian envirotechnical national identity if passengers were to take too much advantage of that relationship. Passengers could, in one trip, shrink travel times, stretch their two-weeks to include more activities and "time there," rewind or fast-forward their way past Canadian winters, and visit an "old world." These juxtapositions of fast and slow, inversions of winters and summers and times and places, and contradictory scales of time travel indicate that discursively manipulating time was not a deliberate strategy at TCA. Instead, the airline built on existing anxieties about what it felt like to live in the modern postwar world, especially the disruption of history and geography. Everyday life had changed in impossible ways, and so advertisements for sun destinations in the postwar pre-jet era of the late 1940s and early 1950s turned the elasticity of time inherent in modernity on its ear and used that elasticity to help Canadians escape modern living, if only for two weeks. They also revealed the consequences of that escape, as rejecting modern living could mean the rejection of the lived experiences of winter. TCA's sun destinations therefore became both places and times, allowing time travel by airplane to maintain Canadian climatic identity without sacrificing the decidedly enjoyable practice of taking a break from Canadian winter conditions.

In the 1940s and 1950s, air travel was still a novel experience, and TCA built on the rhetoric of safety and reliability established in its system advertisements to capitalize on the exciting feeling of traveling through time. As one newspaper columnist opined in 1949, "how I long to be like those who can quickly rise above the ordinary daily grind and fly like the birds to

a distant land...I want to enjoy the thrill of going from winter to summer just like that."[641] Air travel, with whatever mystique it still had, was as magical as time travel, whisking passengers away to both exotic places *and* exotic times. However, by the time turbine-powered airliners roared on to the scene (or perhaps whispered, as I will show in the next chapter), air travel had become part of "postmodern ways of thinking, feeling, and doing." The act of vacationing and the methods by which Canadians took their vacations were no longer magical, but instead one of the many "entertainments, spectacles, happenings, and distractions" of postmodern industrial capitalism.[642] They no longer needed to be made sense of inside the disorienting effects of modernity because they were an accepted part of it; the jet age had come to Canada.

[641] T. W. Pue, "Here and There," *St. Albert Gazette*, February 5, 1949, 7.
[642] Harvey, *The Condition of Postmodernity*, 285.

5. Four Short Stories About Jets

Karen's eyes were wide with anticipation. She and her mother had flown from Canada all the way to Britain on one of "TCA's giant jets" to meet her grandmother for the first time, and she was feeling overwhelmed by the whole experience. As she disembarked from the plane and saw her grandmother waiting, Karen struggled with what to call her. She had heard her "mummy" talk about "her own mummy," and "the place that was home before she came to Canada," so she haltingly stammered her way through the word until "suddenly, it was there":



Figure 14: "Karen" and her "giant jets," December 1960.

"Grandm--Grand--mummy!"[643]

[643] Ad. No. 1-101TA, December 1960, Air Canada Collection, CASM.

"Karen" and her "Grandmummy" appeared in a series of TCA advertisements through early 1961, using what McGee called "emotional appeal" to encourage family travel overseas.[644] Although this appeal was deliberately focused on women and families—"Karen" appeared in national magazines such as *Maclean's* as well as women's pages in major newspapers—her "quiet little story from the big and noisy world" was a way for TCA advertisers to separate the everyday experience of air travel from the potentially disorienting modern collapse of space and time that it could bring.[645] Jets were considered among the greatest threats to Canadian place-based envirotechnical self-fashioning and introducing Karen was a way to remind everyday travelers of the intimate connections air travel could create. In this chapter, I will explore how this happened. How did jets at TCA, and the infrastructure and travelways necessary to support them, change TCA's relationship to the modern Canadian envirotechnical nation?

Jet-age modernity, I argue, was different from piston-powered modernity. First, there was the issue of "speed-up": the jet was even more time-space compressive than its older counterparts. The North Star could go from Toronto to Vancouver in about a half day in 1950, but a DC-8 a decade later could do it in five hours. The speed and power of jets shocked even a seasoned pilot like McGregor; on one of his first full-jet-powered transatlantic flights in 1960, he expressed concern that the setting sun would blind the pilot, only to be reminded "that the sun was never going to get into our eyes, as we would be landing at Montreal only an hour later than our Prestwick take-off." He thought of a quote from Rudyard Kipling, master of stories about technology transcending space and time, in which he claimed that "some day...we shall hold the

[644] Even McGee used scare quotes. Memorandum from J. A. McGee, "Atlantic Services Advertising," 25 July 1961, Air Canada Collection, CASM.
[645] Ad. No. 1-324-TA, July 1961, Air Canada Collection, CASM.

Sun level in his full stride."[646] From TCA's point of view, this wasn't always a good thing. As a state airline, it was responsible for supporting, maintaining, and shaping the discursive role of commercial aviation inside Canadian national mythmaking, but the North Star was the last airplane that TCA could truly claim was made in Canada for Canada. Furthermore, as the speed of the transports themselves increased, so did the pace of aircraft acquisitions; TCA added four new types of passenger transport to its fleet between 1954 and 1965, all of which were British or American in origin.[647] Without a Canadian pedigree to rely on, TCA's publicity materials could not connect time-space compression with Canadian technological prowess as enthusiastically as during the North Star years. The airline was left to reckon with the consequences of jet travel stripped of technological nationalism as increasingly accessible high-speed air transport continued to "shrink" Canada and extend passengers' geographic reach.

The first two "short stories" in this chapter engage in particular with the jets themselves as the machines responsible for this process: the Vickers Viscount, TCA's first turbine-powered aircraft, and the Douglas DC-8, TCA's first "full jet."[648] Publicity for the Viscount, introduced in 1955, did not stray too far from the airline's postwar system advertisements, especially in its

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[646] McGregor, *The Adolescence of an Airline*, 118. For more on Kipling, technology, and modernity see Marian Aguiar, *Tracking Modernity: India's Railway and the Culture of Mobility* (Minneapolis: University of Minnesota Press, 2011), 37-48; Nicholas Daly, *Literature, Technology, and Modernity, 1860-2000* (Cambridge, Cambridge University Press, 2004), 56-75.

[647] Those were the British Vickers Viscount and Vickers Vanguard, and the American Lockheed Superconstellation and Douglas DC-8.

[648] In his memoirs, McGregor considered the introduction of the DC-8 in 1960 as when "we had taken Canada into the jet age." Although I am loath to question McGregor's authority on the subject, I will consider *all* of TCA's turbine-powered aircraft in this chapter, including the turboprop Vickers Viscount, introduced in 1955, and other turboprop airliners such as the Vickers Vanguard. The press certainly had no qualms about calling them "jets," and McGregor lamented in his memoirs that the word "jet" is fuzzy at best and was not a "happy choice" to describe how turbine engines actually work. McGregor, *The Adolescence of an Airline*, 117, 50-51. See, for example, TCA Purchases 15 Viscount Jets," *The Globe and Mail*, November 20, 1952, 3.

frequent mention of the "flight-seeing" that could take place out of the plane's windows, at the time the industry's largest. However, as TCA prepared to enter the jet age in earnest with the introduction of the DC-8 in 1960, its publicity began to take on a different tone. Instead of looking to the past for inspiration, TCA used its fleet—which would be all-turbine by the early 1960s—as a way to look to the future of travel and of Canadian technological achievement. This is the subject of the second story. TCA referred to its DC-8s as "giant jets," but airplanes were not the only thing that was "giant"; this story will also reflect on airports, the new modern megaprojects of the jet age, which geographically shaped how Canadians would come to interact with and move through the experience of air travel.

Another way in which jet-age modernity was different from earlier mid-century versions was that it was more accessible and the entire process of air travel was scaled-up. Jets in general were larger and faster than piston-powered airliners, and therefore more routes were introduced, fares went down (at least until the 1970s), and capacities went up. For example, 1958 was the last year in which more Atlantic crossings were made by sea than by air. Like the speed-up, this scaling-up was felt at TCA in a number of places and, much like in the first few years after the war, the airline found itself scrambling to anticipate what its passengers and the government would expect of it. The third "short story" is about one instance of this anticipation: "ReserVec I," the world's first real-time electronic airline reservations system and one of the earliest Canadian-built general-purpose computers. Commissioned by TCA and built by a Canadian computer firm through the mid-1950s, it was used by TCA as proof that it was predicting the future of air travel, as well as proof that its federally-supported status was still fruitful and that it was still capable of creating "magic." The fourth "short story" explores another aspect of the scaling-up by continuing the discussion of sun destination promotions that began in Chapter 4.

They underwent a major transformation in terms of both volume of passengers and volume of publicity in the jet age, and the delicate attempts to turn snowbirding into time travel evolved into the wholesale rejection of Canadian winters. By the 1970s, Canadian intelligentsia began to question the role of snowbirding in destabilizing a Canadian sense of national belonging and occasionally equated leaving Canadian winters behind with leaving *Canada* behind.

As TCA began its first turbine service in 1955, it was already becoming difficult to maintain the delicate balance between the celebration of Canadian geographies and their annihilation by technologies of modernity; by the late 1960s, flying was a form of mass transit, and it was virtually impossible for everyday passengers to imagine travel with Air Canada as something particularly Canadian. These short stories cover those fifteen years and set up the ironic outcome of carrying TCA's mandate and national self-fashioning into the jet age: "shrinking" geography by air had become *so* mundane that it was no longer easily connected to Canadian-ness. Perhaps TCA had done too good a job of convincing Canadians to fly. Perhaps, too, the entire suite of high-modern technological systems used by urban Canadians in the 1960s and 1970s—snowplows, covered garages, hockey arenas with central heating—had distanced them too far from their character-building geography and climate. Regardless, the airline was unable to continue its national envirotechnical self-fashioning; even the airline's change of name to Air Canada in 1964, the subject of the Conclusion, points to the meaninglessness of transcontinentality in the jet age.[649] By the mid-1980s, Air Canada fully divorced from Canadian self-fashioning through deregulation; as Air Canada celebrates the 80th anniversary of its first transcontinental flight in 2019, it is no longer supported by the federal government.

[649] For clarity's sake, I will use "Trans-Canada Air Lines" when referring to anything that takes place before 1965 or covers a time span that crosses 1965 and Air Canada for anything that takes place exclusively after 1965.

Each short story touches on at least one of the publicity strategies, internal tensions, or public debates that shaped TCA's public-facing material in the postwar pre-jet age. Framing them this way serves two important purposes for this work. First, at the height of the jet age, TCA's public-facing material was far too fragmented and numerous to effectively summarize. By the mid-1960s, TCA was advertising to multiple demographics and in multiple media, working with other advertising agencies besides Cockfield, Brown, and printing certain material in multiple languages for use in its European and Asian markets, not to mention introducing the dizzying array of fare plans, loyalty clubs, and vacation packages designed to attract as many new types of passengers as possible. These short stories therefore act as historical anecdotes, providing case studies to illuminate the larger trends in TCA's public-facing material through the jet age and highlighting important turning points in the eventual disintegration of air travel and Canadian nationalisms. Second, they each act as epilogues for the analytic threads that carry through the earlier chapters: TCA's discursive uses of Canadian history and geography, its tenuous relationship to the state, the public relations of introducing and developing new aircraft, and the selling of specific destinations. The stories are arranged roughly chronologically and may be read in that order, but they can also be rearranged and read in conjunction with relevant parts of Chapters 1 - 4.[650]

[650] Here I am following the "choose-your-own-adventure" model featured in Ben Bradley's *British Columbia by the Road*, 13. He suggests that the two parts of his book can be read in any order, or each read on their own as a complete story in order to mimic the highway travel he discusses.

The Vickers Viscount, Aerial Views, and Turbo-Prop Flight

Trans-Canada Air Lines became the first airline in North America to enter the jet age on April 1, 1955, debuting the British-built turboprop Vickers Viscount only a few weeks before American regional airline Capital Airlines. McGregor later claimed that the Viscount was an "instant success" when it entered service at TCA for two major reasons: "the virtual elimination of the tremendous vibration of the piston engines," and "the huge windows."[651] These two features especially are the subject of this short story and make the Viscount a sort of ideal high-modernity enacted and embodied. Not only was the Viscount unequivocally accepted by everyone who set foot on one—no one missed the North Stars as the jets gradually replaced them—but the sleek, modern lines, parallel engine slipstreams, and oversized windows meant that passengers would literally have the perfect "top-down" view of their nation.

Essentially a halfway point between a piston engine and a turbine engine, turboprop engines—in the case of the Viscount the Rolls-Royce "Dart" model—use turbine power to drive a propeller, rather than supplying the thrust directly. British aeronautical magazine *Flight* reported that TCA's adopting turbine technology "completely alters" the North American airline landscape because an operator providing turboprop service "really has something *new* to offer." The Viscount had the potential to make TCA stand out because unlike in Europe, "public consciousness of technical aspects of airline operations...is more highly developed" in Canada, and emphasizing the new type of propulsion would guarantee increased interest and "a wide desire to experience Viscount travel."[652] TCA did it all that it could to stimulate that desire by highlighting the Viscount's engines and windows, both of which reflect TCA's earlier publicity.

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[651] McGregor, *The Adolescence of an Airline*, 73.
[652] R. J. B., "T. C. A. and the Viscount," *Flight*, April 15, 1955, 502.

Emphasizing the smooth, quiet ride was at least peripherally an attempt to sidestep some of the pitfalls the airline had encountered with the North Star, and the Viscount's large "Panorama" windows engaged with the same aerial views discourse discussed in Chapter 1, suggesting that at first, TCA believed its jet-age passengers' priorities would carry over from the piston age.

The decision to add Viscounts to TCA's fleet was a relatively easy one, at least compared to the later jets. The handful of full-jet airliners that were available in the early 1950s, such as the British-built De Havilland Comet and the Avro Canada C-102 Jetliner, were voracious consumers of fuel and were not efficient or safe enough for airline use.[653] McGregor first encountered the Viscount, the first commercial aircraft to be equipped with turboprop engines, during a visit to British aviation manufacturers in 1949. Fêted for its smooth ride because the slipstreams generated by the propellers did not overlap—which historian Philip Smith attributes to either "pure luck or genius"—the Viscount so impressed McGregor that "he was like a boy confronted with a train set in a store's Christmas display: he just had to have it."[654] Like other airline executives, McGregor knew even then that jets were coming, but by the time TCA was preparing to replace and supplement its North Stars several years later, the aviation landscape looked different. Much like how the Second World War had delayed the development of cabin pressurization for the civilian market, military production for the Korean War had made airliner development a lower priority; TCA's first new aircraft purchase in the 1950s was the piston-powered Lockheed Super Constellation. Even then, those 63-seaters were not considered enough for the growing demand for air travel and TCA continued its search for supplementary aircraft.[655]

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[653] The Comet, for example, had a series of very public crashes through the early 1950s and despite interest from airline executives such as Howard Hughes, never entered into full production.
[654] Smith, *It Seems Like Only Yesterday*, 156.
[655] Smith, *It Seems Like Only Yesterday*, 158.

TCA began looking seriously at turbine-powered aircraft again in 1952, and by that time some of the Viscount's systems, such as the climate control, pressurization, and fuel relays, were considered outdated and poorly designed. At TCA's request, those systems were revamped and underwent specialized cold-weather trials in Churchill, Manitoba, in which the Viscount performed "brilliantly" and "excellently," according to various TCA publicity materials. After some more modifications, including replacing door seals that froze at low temperatures and prevented pressurization, TCA took delivery of the first of its 15 Viscounts in late 1954.[656] TCA's first Viscount fleet worked along the central part of its transcontinental route, from Montreal to Edmonton, and by mid-April 1955 it was flying the Montreal-Toronto-New York corridor as well. In a June 1955 press statement, McGregor claimed that TCA's decision to move into turbine power before any other airline in North America was a result of thinking "10 years ahead." [657] Being first pointed to Canadian air-mindedness, but also to Canada's willingness to co-operate with international industry. In its own public-facing material, Vickers-Armstrong made a great deal of the fact that the first Viscount that flew to Canada in February 1954 for its winterizing tests was the first transatlantic crossing by turbine-powered airplane.[658] Vickers advertisements printed in both British and Canadian newspapers showed the Viscount flying across a maple leaf and suggested that TCA's purchase was proof of both "TCA enterprise" and that "as well as being able to design the world's finest aircraft, Britain can also *produce* them."[659]

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[656] Smith, *It Seems Like Only Yesterday*, 160.
[657] Charles Thoraben, "Viscount Opens New Era in Commercial Aviation," *Chronicle* (Alberta), June 16, 1955.
[658] This was especially resonant because Vickers had manufactured the Vimy that made the first transatlantic crossing by air in 1919.
[659] Advertisement, "TCA Enterprise Brings the Viscount to Canada," *The Globe and Mail*, February 18, 1953, 3. Advertisement, "The Viscount Earns $11,500,000 For Britain," *The Observer* (London, UK), November 23, 1952, 3.

The Viscount's genesis story, from McGregor's love-at-first-flight introduction—he literally claimed in his memoirs to have "fallen for the charms of the Viscount"—to their cold-weather tests, became canon at TCA and appeared frequently in the airline's publicity material.[660] A 1954 pamphlet introducing passengers to the "'Inside Story' of the Viscount Propeller-Turbine Skyliner" began with a note from McGregor for "our air-minded friends" who "would like to know more about the Viscount." The note ends with McGregor's signature, a tactic that TCA used occasionally to lend intimacy and personality to its advertising material.[661] The tests at Churchill in particular were a coded way to inject some Canadian-ness into the Viscount. Lacking the Canadian manufacture, evocative name, or even the British-American "compromise" pedigree of the North Star, the Viscount could not as easily be folded into Canadian envirotechnical rhetoric. The solution was for TCA's publicity to lean heavily on what was necessary to *make* it Canadian: the "rigorous winter testing" that gave the Viscount both literal and figurative license to operate in Canada.[662] There was something special, apparently, about what one reporter called "Canadian conditions and flying customs" that required Canadian ingenuity to overcome.[663] In these frequent mentions of the Churchill tests, TCA relied on older tropes of Canadian geographic and climatic barriers to mobility; in one brochure, in fact, an illustration of the Viscount at Churchill is accompanied by an Indigenous Canadian on a dogsled gesturing broadly towards the airplane.[664] Pairing references to cold-weather performance with

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[660] McGregor, *The Adolescence of an Airline*, 41.
[661] Adv. 42405-11-54-150M, 1954, Air Canada Collection 005.003, CASM.
TCA used the signature of Vice President, Traffic W. G. "Gordie" Wood in a 1955 campaign that focused on how much cabin crew were enjoying the Viscounts that will be discussed in more detail below. Ad. No. 5-78S, 1955, Air Canada Collection, CASM.
[662] Adv. 42406-12-54-150M, 1954, Air Canada Fonds RG70, vol. 113, LAC.
[663] Charles Thoraben, "Viscount Opens New Era in Commercial Aviation," *Chronicle* (Alberta), June 16, 1955.
[664] Adv. 42405-11-54-150M, 1954, Air Canada Collection 005.003, CASM.

its various "firsts" made the Viscount as Canadian as possible, despite there being much less Canadian about it than the North Star.

Of course, the part of the Viscount that made all these "firsts" noteworthy was the Rolls-Royce turboprop "Dart" engines. TCA made a point in its publicity material of emphasizing the ground-breaking nature of those engines in terms of both technology and passenger comfort. Passengers flying in Viscounts in 1955 would have received in their seat-back folders a small brochure titled "How the DART Propeller-Turbine Works: Power heart of the Viscount Introduced to North America by Trans Canada Air Lines."[665] Informational materials for travel agents and passengers about the Viscount in general always included a section on the engines and usually showed a cross-section of the turbine to explain that a "propeller-turbine engine employs a method of operation entirely different to the reciprocating gas engine with which we are familiar." The method of operation was explained, at least to a degree that laypersons would understand, alongside flowery superlatives about Rolls-Royce: "no other manufacturer has so honoured a name, so star-studded a history."[666] Passengers appeared to have forgotten the last time TCA bought a Rolls-Royce-powered airliner, since it was confidently referred to as "*the* symbol of reliability in automotive and aircraft engine manufacture."[667]

The arrangement and spacing of the engines, projected far from the leading edges of the wing, as well as the fact that there were very few moving or reciprocating parts made the Viscount a much more comfortable ride than piston-powered aircraft. This was one of the reasons McGregor was so impressed with the Viscount when he first encountered it in the late

[665] Adv. 1341, 1954, Air Canada Fonds, RG70, vol. 113, LAC.
[666] Adv. 44439-12-54-50M, 1954, Air Canada Fonds RG70, vol. 113, LAC.
[667] Or at least, TCA wanted them to forget. Adv. 44883, 1956, Air Canada Collection 005.005 Box 09, CASM.

1940s and one of the reasons TCA eventually chose it over competing American models. It also became a major selling point. Just as the North Star was regularly characterized as the "great four-engined North Star Skyliners," the Viscount was introduced on the market as the "Incomparable Viscount." The material prepared for travel agents focused on "the combining factors of the propeller-turbine engines...smart cabin interior design, [and] speed and quietness of flight, [that] make the Viscount ride one of matchless comfort. Passengers like to arrive 'Viscount fresh.'"[668] Whatever "Viscount fresh" meant, it was a condition borne of a smooth, quiet ride, so smooth and quiet that "you won't find a ripple in your coffee," "half dollars obediently stand on edge and there's no danger of eyestrain when you read your newspaper."[669]



Figure 15: 1955 promotional material for the Vickers Viscount.

[668] Whatever that means. Memorandum, "TCA's *Viscount*—a New Standard of Flight," March 1955, Air Canada Fonds RG70, vol. 113, LAC.
[669] Adv. 44883, 1956, Air Canada Collection 005.005 Box 09, CASM.

Descriptions of how easy it was to read, sleep, eat, and converse with fellow passengers and cabin crew were also common features of early Viscount promotions, which helped TCA's efforts to connect complex new technologies with everyday flying experiences.

TCA might have over-emphasized Rolls-Royce's manufacturing record, but that was nothing compared to its description of the Viscount's comfort features. In one informational brochure, three discrete mentions of how smooth and quiet the Viscount was—a "remarkably low noise- and vibration-level," the "remarkable freedom from vibration," and "the [Viscount's] smoothness and effortless ease"—appeared within three pages of each other.[670] Viscounts were "turbine-hushed," "smooth as silk," "zephyr-swift," "cloud-cradled," and could "SPIN away the miles in a whisper." [671] It made sense to focus on the Viscount's passenger comfort features because not only was the smooth and quiet ride due to a new modern type of engine, but noise reduction was a subject "on which we [at TCA] were inclined to be a little bit tender."[672] Passenger comfort was still a delicate issue, and the airline was working on initiatives to quiet its North Stars at the same time it was preparing the Viscount for service. One of those initiatives was the cross-over system discussed in Chapter 3 that directed the exhaust away from the fuselage of the aircraft. Compared to the North Star, selling a whole new aircraft *built* to be quiet and vibration-less, was easy. The first magazine ads (Figure 15) for the Viscount showed passengers such as a sleeping girl cuddling a doll, and the tagline "so swift...so smooth...so restful." The series infrequently mentioned turbine power, hidden in small letters under the first

[670] Adv. 42405-11-54-150M, 1954, Air Canada Collection 005.003, CASM.
[671] Memorandum, "TCA's *Viscount*—a New Standard of Flight," March 1955, Air Canada Fonds RG70, vol. 113, LAC. Adv. 44440-11-54-100M, 1954, Air Canada Fonds RG70, vol. 113, LAC. Adv. 44439-12-54-50M, 1954, Air Canada Fonds RG70, vol. 113, LAC. Adv. 44548-4-56-50M, 1956, Air Canada Fonds RG70, vol. 113, LAC.
[672] McGregor, *The Adolescence of an Airline*, 54.

appearance of the word "Viscount." Instead, the copy emphasized that "in 1955 TCA passengers will be the first on this continent to experience the delightfully restful flight, and remarkable lack of vibration which distinguish this swift-flying aircraft."[673] Restful flight and a new propulsion system created what one early ad for the trade market referred to as "a notable 'double-first' in airline operation on this continent"; TCA was looking to the future of air travel, but was still forced to reconcile with its past struggles with noise reduction and passenger comfort.[674]

The smooth ride was not the only improved aspect of the TCA passenger experience. The "trade-mark of the Viscount," as McGee called it, was the aircraft's "distinctive oval window."[675] The Viscount's double-layered "Panorama" windows were the largest in the industry—26 inches high and 19 inches wide—and required specialized testing to ensure that they would not shatter as the difference between cabin and outside pressure increased with altitude. The double-layered windows, like the engines and like the North Star's new cabin pressurization, had both an operational and comfort function. They helped maintain structural integrity when the cabin was pressurized at altitude, and they reduced fogging and icing for better views. They also featured heavily in promotional material. Windows were a recurring motif in the first informational booklets designed for travel agents and the public; the cover featured a window-shaped cut-out framing a Viscount and supported by Vickers's lion logo. It was common to show illustrations of passengers in their seats and describe their experiences, but in Viscount promotions the windows were generally the focus of the illustrations instead of the passengers. Travel agents were told to encourage passengers to bring cameras because "yes, even

[673] Ad. No. 5-29S, 1955, Air Canada Collection, CASM.
[674] Ad. No. 5403-US, 1954, Air Canada Collection 005.005 Box 05, CASM.
[675] Memorandum by J. A. McGee, "Advertising—The VISCOUNT," 20 December 1954, Air Canada Collection, CASM.

the passenger on the aisle can enjoy an uninterrupted view" and passengers were reminded that "broad panoramic views" were "a flight-seeing thrill."[676] The extra-large windows paired with the "ultimate flight experience" of vibration-free flight turned your seat on the Viscount into:

> "Your flying armchair with the 'picture window.' The opportunity to view Mother Earth from a vantage point high in the air has always been one of the fascinating accompaniments of plane travel. The Viscount in this, as in so many ways, sets a wholly new standard in air travel...Here indeed is your 'Armchair with the Picture Window,' from which you can comfortably observe the constant changing cloud formations, or view with serene superiority the face of the countryside below. Here indeed is a deeply cushioned, comfortably reclining haven where you can relax and rest, while your swift Viscount speeds across the miles to your destination."[677]

TCA was not the only airline to sell the Viscount's windows—Pigott accuses "every airline's public relations people" of this—but they had a special currency in Canada based on its history of using aerial views as part of a high-modern envirotechnical experience.[678] As discussed in Chapter 1, bush flying, aerial legibility, and surveying projects illustrated the ways in which Canadian technological ability could be modified to suit the nation's geographic realities. The Viscount was easily the most successful aerial-views mechanism in TCA's arsenal, with no uncomfortable engine noise and even *bigger* windows than the North Star; if it had been built in Canada, the Viscount would have been a very powerful symbol of Canadian technological nationalism. Passengers noticed, writing to TCA that the Viscount was "terrific for comfort and

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[676] Memorandum, "TCA's *Viscount*—a New Standard of Flight," March 1955, Air Canada Fonds RG70, vol. 113, LAC. Adv. 44548-4-56-50M, 1956, Air Canada Fonds RG70, vol. 113, LAC.
[677] Adv. 44439-12-54-50M, 1954, Air Canada Fonds RG70, vol. 113, LAC.
[678] Pigott, *National Treasure*, 345.

viewing."[679] On this front, at least, it appeared that TCA's jet-age priorities were the same as they were in the immediate postwar years.

The impetus behind all of these advertising strategies was to get passengers comfortable with the idea of a new type of airplane and to convince them of "the progressiveness of TCA" in choosing this leading-edge technology.[680] This was more difficult to do for the Viscount than the North Star because the Viscount was only peripherally Canadian, but the idea that to fly Viscount was to prefer Viscount was a relatively easy sell. "Your first flight in a Viscount will be an occasion you will always remember," claimed an early promotional brochure.[681] "Happy is the air traveller whose destination permits him to fly by TCA Viscount," began another.[682] It turned out that passengers *did* prefer the Viscount, and apparently bristled if they learned that their flights would be on other types of aircraft. The editors of *Between Ourselves* even noticed the high volume of laudatory comments about the Viscount and added a disclaimer to the September 1955 "What Others Think of Us" testimonial section that "judging from the general consensus of opinion, our company can be both proud and justified in having decided to augment its equipment with such a plane."[683] In the following issue they added a subsection to the "What Others Think of Us" column called "Viscount Briefs," which included short comments such as "more Viscounts...please," "MY TRIPS on your Viscount are of the finest," and simply "best ride ever."[684] This was a change of pace from a decade of complaints about the North Star, which was still being disparaged by passengers. One set of "Viscount Briefs" was printed next to a

[679] "What Others Think of Us: Viscount Briefs," *Between Ourselves*, 15 October 1955, 6.
[680] Adv. 42405-11-54-150M, 1954, Air Canada Collection 005.003, CASM.
[681] Adv. 42406-12-54-150M, 1954, Air Canada Fonds RG70, vol. 113, LAC.
[682] Adv. 44439-12-54-50M, 1954, Air Canada Fonds RG70, vol. 113, LAC.
[683] "What Others Think of Us," *Between Ourselves*, 15 September 1955, 4.
[684] "What Others Think of Us: Viscount Briefs," *Between Ourselves*, 15 October 1955, 6.

comment from a passenger wondering why there was no outlet for electric razors on the North Star, for example. After their first flight on a Viscount in the summer of 1955, a passenger suggested that "the Viscount be used in your trans-Canada flights as soon as possible. The noise factor of the North Star...is still sufficient to influence a great many people...to use the U.S. airlines for long trips...I am certain your company would be surprised at the business lost this way."[685] Despite a lack of explicit Canadian mythology, the Viscount took less work to get the passengers on board, literally and figuratively. The modern Canadian envirotechnical nation was perhaps becoming a bit less Canadian.

Like the North Star, the Viscount was relatively unique to TCA and represented the latest in air travel technologies, but unlike the North Star, the Viscount essentially advertised itself. TCA could therefore use the plane's goodwill with passengers to continue to self-fashion as a standout airline because of its technological choices. Nowhere is this more evident than TCA's advertising Viscounts to the American market, largely because TCA was not under as much pressure to emphasize the Canadian-ness of the airplane itself. Although it was only briefly the only airline flying Viscounts in North America, TCA was certainly the largest airline using the largest numbers of turboprops for some time due to the fact that turboprops in general were best suited for short- to medium-range flights and were therefore more appealing to local or small regional airlines. TCA deliberately used its Viscounts to show that it was "ahead of other carriers south of the border" in advertisements for Americans that used such modern techniques as white space "to give the feeling airiness and distinction" and a "planned lack of superlatives."[686]

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[685] "What Others Think of Us: Poor North Star," *Between Ourselves*, 15 August 1955, 4.
[686] These techniques also appeared in Viscount ads for the Canadian market, but with "an institutional appeal predominating." Memorandum by J. A. McGee, "Advertising—Introducing the Viscount," 3 December 1954, Air Canada Collection 005.005 Box 05, CASM.

Advertisements to the American market needed to have what McGee called "'snob' appeal," especially because of the saturation of U.S. airline advertising, and the first discrete Viscount campaigns targeting Americans had snobs in spades.[687] One featured a series of well-dressed men and women, each of whom "INSISTS on TCA Viscount to Canada." Sporting their finest furs, these discerning consumers were getting "a thrilling glimpse of tomorrow's air travel—*today!*" by choosing TCA, "the airline that brought turbo-prop flying to America."[688] This campaign was wildly successful: it began in Fall 1955, was expanded in early 1956, appeared in magazines such as *National Geographic*, the *New Yorker*, and *Time*, and had an estimated total circulation of over 5 million.[689] McGee believed that another campaign from 1956 featuring a series of "posed photographs" of "typical reasons for visiting Canada," including a woman in a skiing costume, did an "excellent national job for us in the U.S." because "we have 'hung our hat' on the fact that we are the only airline operating Viscounts to Canada."[690] It appeared in national magazines such as *Time* and claimed that "*only* TCA flies the world's most modern airliner—the turbo-prop Viscount to Canada."[691]

Interestingly, TCA took pains to remind both American and Canadian passengers that the Viscount's new modern systems were not *too* new or *too* modern by contrasting it with the service they would find on all of TCA's fleet. In one 1955 newspaper advertisement, a smiling stewardess shares the latest "news about TCA": the airline was bringing "smooth-flying

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[687] Memorandum by J. A. McGee, "Magazine Advertising in the U.S." 6 January 1956, Air Canada Collection, CASM.
[688] Ad. No. 5-208-USN, 1956, Air Canada Collection, CASM.
[689] Memorandum by J. A. McGee, "Magazine Advertising in the U.S." 6 January 1956, Air Canada Collection, CASM.
[690] Memorandum by J. A. McGee, "U.S. National Magazine Campaign—1957," 25 January 1957, Air Canada Collection 005.005 Box 07, CASM.
[691] Ad. 13768-1, 1957, Air Canada Collection 003.005 Box 07, CASM.

Viscounts" to North America. "Along with so much that's *new* goes something that's cosy [sic] and traditional," the copy claimed, "the thoughtful, alert friendliness of the people TCA chooses to serve you."[692] The other advertisement in this series relied on TCA's frequent use of children. A small boy named Tommy has left a note for the stewardess on his TCA flight saying that "I want to marry you because you were so nice to me on my trip." The advertisement copy takes this as proof that TCA had both "shiny new planes" and "old-fashioned hospitality and helpfulness." Tommy's story was supposed to contrast TCA's potentially intimidating modern jets with smaller and more intimate experiences and paved the way for the "Karen" series that opened this chapter. When situated inside TCA's first foray into turbine power, these techniques suggested that "the most modern types of aircraft" could be compatible with "old-fashioned" service values, representing another discursive blend of past and future, and old and new.[693] The Viscount may have had "every modern feature" of "tomorrow's" airliners, but TCA still had to align it with older paradigms by evoking climatic barriers to mobility, aerial legibility, and personable service.[694]

"Giant Jets," TCA's All-Turbine Fleet and Jet-Age Travelways

"The Viscounts were well bedded down on the line when we began looking toward a new era which would revolutionize international flying and change the concept of global distances," wrote long-time TCA pilot George Lothian in his 1979 memoirs. "The big jets were looming closely over the horizon."[695] In this section, I will examine how TCA introduced what public-

[692] Ad. No. 5-78S, 1955, Air Canada Collection, CASM.
[693] Advertisement, "Dear Miss Stewardess," 1955, Air Canada Collection, CASM.
[694] Adv. 42406-12-54-150M, 1954, Air Canada Fonds RG70, vol. 113, LAC.
[695] Lothian, *Flight Deck*, 156.

facing material frequently called "big jets"—the American-built Douglas DC-8—into its fleet, especially as they contributed to airline infrastructure in Canada in general. Like the Viscount, the DC-8 was heralded as a step into the travel future and was strategically introduced on the twentieth anniversary of TCA's first transcontinental flight. Its new type of powerplant—a true "jet"—was incorporated into the airline's publicity as a highly futuristic, highly modern type of transportation that was, as always, best suited to Canadian air-mindedness. However, the DC-8 and the expanded jet-age infrastructure accompanying it were not without detractors and controversies. This short story is therefore not simply about the jets themselves, but also about Canada's jet-age airports, the new patterns of mobility that emerged as increased numbers of passengers moved to and from those airports, and the figurative fallout from them. Canada's entry into the jet age in earnest was a turbulent ride, which began three years before TCA's first "big jet" entered service.

1957 was a big year at TCA. The airline was celebrating 20 years of service. It was also the airline's first without Howe, who had kept TCA in his portfolio regardless of which Cabinet position he held since he proposed the *Trans-Canada Air Lines Act*. He was defeated in the June 1957 federal election and was replaced by new Minister of Transport George Hees. McGregor also used 1957 as a chance to reinvigorate his focus on passenger relations. Because he realized that jet travel would fundamentally change the passenger experience, he hired the airline's first discrete operations research manager and sought to modernize TCA's reservation system, the subject of the next short story. Most importantly here, it was when TCA announced to the flying public that it was transitioning its entire fleet to turbine power. The airline had publicly announced its intent to purchase DC-8s in 1956, and in January 1957 shared that it would be purchasing 20 turboprop Vickers Vanguards, the larger cousin of the Viscount known for its

"double-bubble"-shaped fuselage, and phasing out its remaining DC-3s, North Stars, and Super Constellations. *Flight* magazine referred to TCA's order of 20 Vanguards as "historic," not only because at over $67 million it was the largest order placed in Britain for any product, but because of TCA's "strong let's-get-rid-of-the-props" attitude despite a lack of incentive in the form of domestic competition.[696] This meant that by the end of 1961, if all went to plan, TCA would be the first airline in the world to have an all-turbine fleet.

Because of this, fleet planning was a major focus of TCA's advertising material in and around 1957. The Advertising department called it the "Planning Year" and created a series of institutional advertisements for newspapers and magazines titled "Progress Report by TCA." They all used what McGee called "bold and dramatic layout and art technique to symbolize TCA's entry into the 'jet age' and at the same time to portray the considerable scope of TCA's future



Figure 16: "Progress Report by TCA: TCA Plans for the Jet Age," 1957.

[696] "Victory to the Vanguard," *Flight*, January 11, 1957, 34.

planning."[697] TCA had issued "progress-report" style advertisements before, usually as an end-of-year summary highlighting the airline's accomplishments, but this six-month campaign deliberately constructed 1957 as a watershed moment at TCA. The airline self-fashioned through these ads as forward-facing, using industrial layouts featuring blueprints, modern-looking graphs and charts, and lots of text. TCA was not yet in the jet age, but centering this campaign around what the airline *planned* to do continued some of the trends found in early Viscount promotions by focusing on TCA's "firsts" and its eagerness to bring in the most modern technology from elsewhere and adapt it to Canadian needs.

The first advertisement from the "Planning Year" campaign was an overview of fleet planning in general. It highlighted the "three fine aircraft...each ahead in its field" that would make up TCA's all-turbine fleet by 1961: Viscount, Vanguard, and DC-8. The majority of the ad space is taken up by illustrations of the "future fleet," but there was still plenty of room for superlatives about the "years of exhaustive study and evaluation" that TCA was undertaking in order to build a well-balanced all-turbine fleet, starting with the "now famous Viscount."[698] Three other advertisements through the summer of 1957 each focused on a different aircraft and a fourth highlighted new reservations research, which will be discussed in the next short story. The one about the Viscount hung its hat on volume; ten Viscounts appeared flying in a birdlike "V" formation and the eye is immediately drawn to the bold, oversized numeral "25," representing how many Viscounts were then in service. "TCA planners were confident that the Viscount would give outstanding service," the copy claimed. "They were right. What could not be foreseen, however, was that the Viscount in a few months would so completely captivate the

[697] Memorandum by J. A. McGee, "Institutional Programme—Canada," March 5, 1957, Air Canada Collection 005.005 Box 07, CASM.
[698] Ad. No. 7-112B-I, 1957, Air Canada Collection, CASM.

air travelling public!" Of course, no ad for the Viscount was complete without mentioning that TCA "brought prop-jet flying to North America."[699] The Vanguard and DC-8 were advertised rather differently, mostly because they were not yet in service. A single Vanguard was pictured from above, which McGee claimed "lends a dramatic and different touch to this particular advertisement," sitting on a runway made up of a stylized blueprint. This symbolized "the planning aspect of this campaign" and looked very different from how airplanes were traditionally pictured in mid-century airline advertising: airborne or on the ground, shown in profile or three-quarter view, almost always facing towards the reader's right.[700] The nose of the Vanguard leads the reader's eye towards the claim that "TCA sets the pace in jet age planning [with the] new Vanguard for medium range routes." As a "luxurious newcomer to Canadian skies," the Vanguard could coast on the goodwill set up by its predecessor while adding extra cargo capacity.[701] This allowed the airline to eventually phase out its all-cargo flights that were generally flown by piston-powered airliners such as the DC-3.

As TCA's first full jet, the DC-8 was introduced with much more fanfare (Figure 16). Its "progress report" focused on the "startling advances" and "dramatic changes" that "the era of the jet airliner" would bring, starting the tradition of referring to the DC-8 as a "Giant" jet. Compared to the "progress reports" about the Viscount, Vanguard, and all-turbine fleet, the DC-8 campaign was decidedly more flowery and devoted more space to the description of the "extensive evaluation of every type of long-range aircraft expected to be available in the next few years" than to passenger comfort or what routes the DC-8 would fly.[702] It also featured a

[699] Ad. No. 7-120B-I, 1957, Air Canada Collection, CASM.
[700] Memorandum by J. A. McGee, "Institutional Advertising," 12 April 1957, Air Canada Collection 005.005 Box 07, CASM.
[701] Ad. No. 7-117-MB, 1957, Air Canada Collection, CASM.
[702] Ad. No. 7-114B-I, 1957, Air Canada Collection, CASM.

scientific-looking but ultimately meaningless line drawing of two DC-8s in flight across a grid meant to signify speed and distance.

The actual inauguration of TCA's DC-8 service in the spring of 1960 was a different affair. The first set of advertisements released for the Canadian, American, and British markets were dynamic and colorful and evoked movement and the human experience instead of "science" and "planning." The visual through-line for the campaign was a young couple jumping exuberantly into the air, waving their hats and TCA-branded valises, and framed by arrows and bold taglines such as "Let Yourself GO" and "GO TCA Jet!" [703] Rather than looking to the future, as was the focus in the "planning" campaign, TCA mobilized its past, relying on older tropes of transcontinentality and Canadian distances. This was because there was even *less* that was Canadian about the DC-8 than the North Star or even the Viscount; without technological Canadian-ness to rely on, TCA was left with the effect its services would have on environmental Canadian-ness. TCA's transcontinental DC-8 service was introduced on the 21st anniversary of the airline's first transcontinental flights in 1939. An advertisement "designed to dramatise the impact of the first DC-8 Jetliner Service across Canada" claimed in bold type that it "comes on the 21st anniversary—to the day—of TCA's *first* service across Canada [and] brings the most striking advances in 21 years. TCA Jetliner Service will set completely new standards—not only in speed, but also in luxurious comfort." [704]

[703] Ad. No. 9-179-1B, January 1960, Air Canada Collection 005.005 Box 10, CASM.
[704] Memorandum by J. A. McGee, "DC-8 Introductory Advertising—Day of Flight Advertisement," 28 March 1960, Air Canada Collection 005.005 Box 10, CASM. Ad. No 0-146-I, March 1960, Air Canada Collection 005.005 Box 10, CASM.

This was a useful anniversary to exploit. Although 21 was not a particularly round number, evoking TCA's first transcontinental flight connected jets, another one of those "black-boxed" technologies that was even *more* difficult to understand because it lacked visible moving parts, to the travel trajectory that TCA had built for itself in the 1930s and 1940s. It could rely on Canadian aviation history to make its jets seem like a type of modern technology passengers could trust and one that was especially suited to Canadian life.[705] When TCA introduced its first one-stop transcontinental route between Montreal and Vancouver in 1961, for example, it named the airplanes flying the route "Silver Dart" after the airplane used in Canada's first controlled powered flight (Figure 17). Despite the fact that the original Silver Dart was not even close to transcontinental, flew in Nova Scotia, a province not even served by the new "Silver Dart," and was not affiliated in the least with TCA, it still used the name, featured a



Figure 17: TCA's "Silver Dart" for the jet age, 1961.

[705] Marc Dierikx uses news coverage of aircraft accidents as a way to explore the idea that although there were fewer crashes, "the public's sensitivity" to them increased as part of a larger "increasingly critical assessment of technology in the public eye." Marc Dierikx, *Clipping the Clouds: How Air Travel Changed the World* (Westport: Praeger, 2008), 77-78.

silhouette drawing of the aircraft in its ads, and suggested that it had "pioneered the Commonwealth airline industry. TCA is proud to maintain this tradition of leadership."[706]

Transcontinentality also worked as a tool to help explain how fast jets were. Promotional material released before the DC-8 entered service encouraged passengers to "just think, Vancouver and Toronto will be only four hours apart."[707] The rhetoric here was not far off from TCA's manipulation of history and geography in its earliest promotional material. Even the stylized maps that appeared in advertisements introducing TCA's transcontinental jet service, which used forced perspective to make Canada appear larger, would not have been out of place in the 1940s. In a 1958 feature about Canada's "Age of Speed," *Globe and Mail* literary editor William French extended the well-established transcontinental travel teleology into the jet age:

> "In 1946, flying from Toronto to Vancouver by Trans-Canada Air Lines was still something of an adventure. The fastest scheduled time for the trip was 17 hours, [mostly in] an ear-cracking DC-3...Now...[TCA] whisks travellers from Toronto to Vancouver non-stop in living-room comfort in less than half the time—eight hours and 15 minutes. But the best is yet to come. Two years from now, when TCA takes delivery of its all-jet DC-8s, the same trip will take four hours...[T]he new giants of the sky will shrink this country—and the world around it—to a size that would have made Jules Verne boggle."[708]

It's all here. The "adventure" and "ear-cracking" discomfort of earlier forms of transportation. The progressive shrinking of travel times and comfort levels. How mind-boggling modern air

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[706] I do not know if TCA corresponded with the only remaining member of the Aerial Experiment Association, John McCurdy, about using the name "Silver Dart." McCurdy had died earlier in 1961, but remained very active in the Canadian aviation community until his death and was occasionally a guest of honor on various TCA inaugural flights. Ad. No. 1-198-1, September 1961, Air Canada Collection 005.001.025, CASM.
[707] Ad. No. 9-179-1B, January 1960, Air Canada Collection 005.005 Box 10, CASM.
[708] William French, "Canada's Mighty Leap Into the Age of Speed, "*The Globe and Mail*, April 5, 1958, A3.

travel might seem to famous travelers (or, in this case, travel-related science-fiction writers) of the past. TCA's "giant jets" were giants in more ways than one, acting as ideal spokes-planes for a nebulously defined "future" of air travel, much as the North Star had done ten years earlier.

Like promotional material from the 1940s and early 1950s, Canada seemed to grow and shrink whenever the need arose in TCA's jet-age advertisements. The ability of airplanes in general, and TCA's airliners in particular, to shrink distance re-emerged in new ways in the early jet age. Canada was so large that setting speed records, as DC-8s did throughout the early years of the 1960s, could be considered not only impressive, but a necessary part of transportation progress in Canada. The DC-8's inaugural flight with TCA on March 27, 1960 set the Montreal-Vancouver speed record with a flying time of five hours and nine minutes. Piloted by Lothian and Herb Seagrim, long-serving Vice President of Operations, it carried all sorts of VIPs, including Hees and his wife, McGregor, and eventual Air Canada president John Baldwin.[709] Canada also stayed "small" when it needed to, especially when the task was selling the DC-8's destinations, which were all in Canada in the early 1960s. In these types of promotions, the idea of "saving time," although it never really disappeared, was given new life. Now, not only would passengers save time compared to rail or vehicle travel, they would *also* save time compared to other types of airplanes and "see how the distance melts away when you go TCA Jet!"[710]

Advertisements for the DC-8 through its first year or so of service were dominated by arrows. Sometimes those arrows evoked dynamism and modernity, as when they surrounded the "Let yourself GO!" couple. When positioned around the airplane itself, arrows suggested speed and movement. Sometimes too they traversed destination images, which stood in for the airplane

[709] Canadian Press, "New TCA Jet Halves Time to West Coast," *The Globe and Mail*, March 28, 1960, 2.
[710] Display Ad. 13, "Starting Date for the TCA DC-8," *The Globe and Mail*, March 25, 1960, 8.

as it flew over a variety of Canadian places. Speed, dynamism, and diversity of vacation choices were all included in "saving time" rhetoric; as one DC-8 newspaper advertisement from Spring 1960 claimed, "wherever it is across Canada that you've chosen for your vacation, just a few pleasant hours in the air will get you there. You'll be at your destination ready to get right on with your plans, the same day you leave home."[711] Arrows passed over bustling cities, pastoral lakes, and majestic mountains, all of which appeared to be so close to one another that they were only an easy jet jaunt away.

It did not take long for Canadians to take to jets, both as a discursive hallmark of high modern culture and as an actual mode of transportation. According to McGregor, TCA began looking for ways to phase out its Viscounts and Vanguards as early as 1963 because "the public regarded anything other than jet travel as passé."[712] However, the transition to full turbine was not embraced with open arms by everyone. First, the transcontinentality enthusiastically portrayed in the airline's promotional materials did not work so well in practice. The smaller cities served by TCA's short-haul "milk runs" using DC-3s did not have the infrastructure to support jets, which was alarming to politicians who saw TCA's transition to turbine power as a harbinger of the airline neglecting certain parts of Canada. A Member of Parliament from Saskatchewan complained to Hees in 1959 that his riding, "a very air-minded city, with almost a pioneer's record in the aviation field," would lose regularly scheduled service as TCA phased out its piston airliners.[713] The unpopularity of transcontinental travel—that is, passengers rarely flew from Vancouver to Toronto—was also used as fodder for parliamentarians who advocated for

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[711] Display Ad. 27, "Get There Fast by TCA," *The Globe and Mail*, April 9, 1960, 22.
[712] McGregor, *The Adolescence of an Airline*, 133. Air Canada *still* operates some turboprop airliners on its short regional flights.
[713] Canada, *House of Commons Debates*, June 12, 1959 (James Pascoe), http://parl.canadiana.ca/view/oop.debates_HOC2402_04/807?r=0&s=1.

the privatization of TCA, the introduction of domestic competition, the reduction of government subsidies, or some combination of the three. Northern Ontario MP Douglas Fisher, who ironically held the seat previously held by Howe, complained about how much money TCA had spent "in order to enter the jet field." "What do we actually gain by getting to Vancouver from Montreal or Toronto a couple of hours faster, or in coming the other way?" he asked in March 1960.[714] These sorts of questions destabilized earlier constructions of air travel as necessary for Canadian unity and of TCA's responsibility to all of Canada by staying on the cutting edge of technological progress. Jets were *too big* and *too fast* to serve the country's best interests; Canada's envirotechnical status as an aviation nation was threatened by this type of airplane.

Next, even passengers and politicians who had embraced the idea of jets as the future of travel were not so enthusiastic once they experienced them firsthand. Lothian described the process like this:

> "On the first few take-offs Mr. Canadian Citizen looked up in wonder at the great giant passing overhead. Such majesty, such an incredible demonstration of power, what an all-encompassing, all enveloping, soul-searing sound. Stunned and a little pleased he stood transfixed, a feeling of pride entering his soul as he read the insignia of his national airline on the DC-8's side. When his scrambled brain returned to normal, he realized this was to be a new way of life and all hell broke loose."[715]

Jets, "Mr. Canadian Citizen" soon learned, were extremely noisy, and the expanded airports that appeared on the outskirts of population centers through this period concentrated the noise around sprawling Canadian suburbs.[716] The elegant high-modern image of a cutting-edge airplane

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[714] Canada, *House of Commons Debates*, March 7, 1960 (Doug Fisher), http://parl.canadiana.ca/view/oop.debates_HOC2403_02/582?r=0&s=1.
[715] Lothian, *Flight Deck*, 159.
[716] On mid-century Canadian suburbs specifically, see Richard Harris, *Creeping Conformity: How Canada Became Suburban* (Toronto: University of Toronto Press, 2004).

branded with the name "Canada" and a red maple leaf, shrinking the country and offering its passengers the "God's-eye-view" of their magnificent nation, had reached its limits. Noise was a common concern in cities across North America, where airports were being retrofitted or reconstructed to accommodate jets. Runways needed to be longer, landscaping needed to be flatter to allow control towers and aircraft to have uncompromised visibility, and capacities needed to grow in general. Increasingly crowded skies troubled airport-adjacent communities, which sought legal, legislative, and grassroots recourse. At New York City's Idlewild airport (later John F. Kennedy International), for example, mothers threatened to push their baby strollers onto active jet runways to protest the noise, and property owners in the nearby Rosedale neighborhood sued the New York Port Authority in 1961 for loss of property value.[717] Like other high-modern megaprojects, those living in the vicinity of mid-century airports were not passive recipients of "modern development," but instead shaped their own jet-age experiences.

The two largest airports built through the late 1960s to "handle the expected onslaught of people" in Canadian cities who had caught what airport historian Bret Edwards calls "jet-age fever" were Montreal-Mirabel Airport (opened in 1975) and what would eventually be called Lester B. Pearson International Airport, located in the Malton neighborhood of Mississauga at the north-west corner of Toronto.[718] The site on which Pearson, as it is informally known in the twenty-first century, was built had been a municipally-owned airport serving Toronto since the

[717] On the baby carriage threat see Jameson Doig, "Public Demands and Technological Response: Austin Tobin, Leo Beranek and the Advent of Jet Travel," *Journal of Aeronautical History* (2017): 26. On Rosedale and other New York-area actions against jet airports, see Nicholas Dagen Bloom, *The Metropolitan Airport: JFK International and Modern New York* (Philadelphia: University of Pennsylvania Press, 2015), 125-138.
[718] Bret Edwards, "Breaking New Ground: Montreal-Mirabel International Airport, Mass Aeromobility, and Megaproject Development in 1960s and 1970s Canada," *Journal of Canadian Studies* 50:1 (2016): 6.

late 1930s. During the war it had hosted one of the British Commonwealth Air Training Plan's Canadian flight schools and the Victory Aircraft factory and subsequently became a hub of Canadian aviation manufacturing. By the 1950s, however, the infrastructure at Malton could not keep up with the size, weight, and frequency of jet flights and the City of Toronto sold the airport to the federal Department of Transport in 1958; the airport was demolished and reconstructed piecemeal through the 1960s. The first new terminal was opened in 1964.

Despite the fact that Malton had a long aviation history (and continued to be the site of cutting-edge Canadian aerospace development such as the Avro Canada CF-105 Arrow long-range interceptor), it was not easy to turn the site into an airport suitable for Canada's passenger jet age. Malton had grown since the 1930s because of the aviation industry there—the A. V. Roe Canada factory employed 50,000 people—but there was still a substantial rural population in the 1960s as well as those who still saw the region as an escape from urban Toronto life.[719] The increased traffic raised concerns about noise and congestion, and residents mobilized almost immediately to bring their concerns to the attention of the government. A chicken farmer living just west of the airport had to give up his farm because the noise scared his chickens out of laying eggs, township councillors told the federal Deputy Transport Minister in a 1961 local hearing. Another councillor claimed that he no longer visited family in Malton because "it's too noisy and the whole house rattles when the jets fly over."[720] The new airport terminals at Malton had scarcely been completed when the federal government announced another massive

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[719] John Sewell, *The Shape of the Suburbs: Understanding Toronto's Sprawl* (Toronto: University of Toronto Press, 2009), 98-100.

[720] John Gillies, "Hearing Told Jet Noise Ruined Farm," *The Globe and Mail*, March 11, 1961, 1. This farmer is one of a long line of farmers associating airplane flyovers with lost output; a mink farmer sued TCA in 1948 for aircraft noise which allegedly caused his mink to eat their offspring. Pigott, *National Treasure*, 255.

expansion in 1968. Transport experts had expected the increases in demand for passenger air travel to tail off by the mid-1960s, but they had not. Malton, Toronto, and Mississauga all kept expanding as planned suburbs encroached on and eventually displaced farming communities. Malton residents wrote to the Minister of Transport en masse in opposition to the expansion and sent a contingent to the inaugural meeting of the Society for Aircraft Noise Abatement.[721] At the end of the year, the decision was reversed and the government instead began planning for a second international airport site in Pickering on the east end of Toronto. The "Pickering Plan" was also abandoned by the mid-1970s and now Lester B. Pearson International Airport is the largest airport in Canada.

Like the airport in Pickering, Mirabel is also a "failed" project. Originally planned to supplement and eventually replace Montreal's airport at Dorval, now Pierre Elliott Trudeau International Airport, the initial enthusiasm for Mirabel rode the wave of nationalism and Montreal boosterism provided by Expo 67, Canada's centennial world's fair in Montreal. Also like the Pickering Plan, the plans for Mirabel began well into the jet age after it became clear that the demand for air travel was not going to wane anytime soon. Therefore, Mirabel was a very forward-looking airport; the government's expropriation of almost 100,000 acres of land in 1969 meant that it would be the largest airport in the world by a significant margin. Because of its scale, state involvement, and on-the-ground resistance from human and non-human actors, airport historian Bret Edwards argues that Mirabel should be characterized as a megaproject "in the purest sense."[722] As a megaproject, Mirabel represented the jet-age Canadian state's

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[721] Elliot Feldman and Jerome Milch, *The Politics of Canadian Airport Development: Lessons for Federalism* (Durham: Duke Press Policy Studies, 1983), 80-84.
[722] Edwards, "Breaking New Ground," 11. See also Edwards "A Bumpy Landing: Airports and the Making of Jet Age Canada" (PhD diss., University of Toronto, 2017).

preoccupation with air travel and physically and discursively re-shaping the nation's geography to fit its narratives of mobility across space.[723] It was also a physical manifestation of optimism about the nation's growth and transportation future, its massive size a signal that Canada would continue to lead in aviation and that its population was modern and global.

It was that very scale that led to the downfall of Mirabel; as policy scholars Elliot Feldman and Jerome Milch put it, "no one in [the Ministry of] Transport had thought through the consequences of such a decision."[724] 10,000 people in the rural village of Sainte-Scholastique were displaced by the expropriation and received little-to-no assistance from the state, and those who stayed witnessed a technocratic "controlling and sterilizing" of their lived landscape.[725] As megaprojects are wont to do, Mirabel ran over-budget, behind schedule, and into hurdles such as disagreements between the airlines and state about whether Mirabel would handle domestic as well as overseas routes. It opened in October 1975, about a year later than expected and just in time for Montreal to host the 1976 Summer Olympics. Even with that added traffic, fewer than 3 million passengers flew through Mirabel in 1976; after a disappointing two decades, the airport ceased commercial operations entirely in 2004.[726] The reasons that Mirabel "failed" are many—passengers did not like having separate airports for domestic and international flights, it was not served well by highways or rail, and the energy crisis of the mid-1970s made air travel an all-around expensive endeavor—but its ascension and decline show the impact that "giant jets" had on how the state and everyday Canadians imagined travel.

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[723] Edwards, "Breaking New Ground," 10. See also David Pascoe, *Airspaces* (London: Reaktion, 2001), 97-99.
[724] Feldman and Milch, *The Politics of Canadian Airport Development*, 61. See 49-79 for their history of Mirabel.
[725] Edwards, "Breaking New Ground," 24.
[726] Feldman and Milch, *The Politics of Canadian Airport Development*, 75.

Jets transformed modern travelways in other ways not limited to the act of flying. Not only did airports expand and noisy jets interrupt the rhythms of daily life, but getting somewhere by jet was a different experience than getting somewhere by piston-powered airplane because of the accessibility of those airports. Both Mirabel and Toronto International were very difficult to access from their respective city centres; public transit options were minimal, as were parking and access road options. Sainte-Scholastique in particular was over 30 miles from downtown Montreal and a promised rail link never materialized. From the public's point of view, getting to the airport became the airline's problem because passengers expected one continuous service between leaving their home and taking off. Passengers had been complaining to TCA about taxis, car services, and airport parking since the 1940s, but, like everything else, the increased volume of the jet age made these complaints more frequent and more visible. In a 1960 CBC interview, McGregor described a futuristic scenario in which rotary-wing aircraft, rail, monorail, or some combination thereof would create a seamless transport experience where passengers could be "checked out, have their tickets lifted on the way to the airport, enter the airport and the aircraft as checked-out passengers with their baggage entirely dealt with, and be airborne in a matter of minutes from the leaving of the downtown city center."[727] McGregor got so inured to fielding questions about airport access that in a question-and-answer session a year later he misinterpreted a press question about if taxiway transportation (that is, getting from the terminal to the airplane) would ever go as fast as 20 miles per hour, answering that he "cannot virtually guess as to when you will be able to attain an average speed of 20 miles per hour between here and the airport." Once corrected, he apologized for missing "the fine edge of your [the

[727] "More Planes, Lower Fares for Trans-Canada Airlines," CBC Digital Archives, Canadian Broadcasting Corporation, originally broadcast April 12, 1960, http://www.cbc.ca/archives/entry/more-planes-lower-fares-for-trans-canada-airlines.

reporter's] sarcasm" to uproarious laughter and then answered a question about prospective helicopter access to Toronto airports.[728] Although McGregor could not offer reassuring concrete solutions to airport congestion in either case, the press and passenger preoccupation with it was an indication that the "jet age" represented much more than just flying somewhere on a jet.

TCA needed to adjust just about everything to accommodate their "giant jets." The airplanes themselves warranted new advertising strategies which drew on tropes such as transcontinentality but without the technological Canadian-ness of their predecessors. They were still doing the same modern time-space compression as the North Star, but faster, further, and carrying larger loads. This made it even more important for TCA to lean on modern Canadian envirotechnicality to support the work it was doing, but also more difficult as the increased size, speed, and volume limited the continuation of a unified promotional identity for the airline that itself relied on a unified Canadian identity. Canada's jet age began to look like everyone else's jet age, with massive "placeless" airports and the same airplanes that operators in the United States, France, New Zealand, and Italy (among others) were using by the mid-1960s. Because of this, the voices questioning what remained Canadian enough about TCA to warrant public ownership grew louder through the 1960s, resulting in revamped passenger relations, a new name for the airline, a slide from nuanced expression of place into caricature, and eventually the deregulation of the airline.

[728] Transcript, speech by Gordon McGregor to the Advertising and Sales Executives Club of Montreal, March 8, 1961, Air Canada Fonds RG70, vol. 132, LAC.

"TCA's Private Genie": ReserVec and Public Ownership in the Jet Age

In keeping with TCA's other anniversaries, the airline used its 25th birthday to celebrate its future rather than its past. In spring 1962, TCA debuted the world's first real-time computerized airline reservations system: ReserVec I. Built by the Canadian branch of British computer firm Ferranti, ReserVec—short for "Reservations Electronically Controlled"— made its debut two years before American Airlines' SABRE system. Unlike SABRE, which was plagued with problems, ReserVec "performed beautifully from the start," exceeding its planned 60,000 transactions-per-day pace and serving as the backbone of TCA's reservations infrastructure for nine years.[729] This short story is about why and how TCA was able to be the first in the world in this regard, and how the development of ReserVec was a response to two factors that might be considered reverse salients in TCA's envirotechnical vision of modern Canada: its service and its monopoly. A "reverse salient," a term used in military engineering adapted by Thomas Hughes in his 1983 book *Networks of Power*, is an aspect of a technological system that is not in lock-step with the rest, slowing the system down and requiring "concentrated action" to proceed.[730] It does not necessarily have to be technological—Hughes' example in *Networks of Power* is an economic disadvantage—and in this case, what was holding TCA back was the public perception of its monopoly status. That some saw TCA's public ownership as a source of complacency was a "critical problem" unforeseen by TCA's "system builders"—another Hughes term—Howe and McGregor, that limited both TCA's physical operations and its corporate efficiency. ReserVec was one of those "innumerable...inventions and

[729] At which point it was replaced by the ReserVec II. Smith, *It Seems Like Only Yesterday*, 218.
[730] Thomas Hughes, *Networks of Power: Electrification in Western Society, 1880-1930* (Baltimore: The Johns Hopkins University Press, 1983), 79-80.

technological developments [that] result from efforts to correct reverse salients."[731] By developing ReserVec over the last few years of the 1950s and first few of the 1960s, TCA was able to twist these criticisms and suggest that rather than complacency and the mistreatment of passengers, public ownership meant that it could experiment with new technologies such as computers and jets without the risk of succumbing to free-market forces. The development of ReserVec was therefore both a reaction to critics of TCA's customer service and a chance to build some of Canada's earliest general computers away from free-market precariousness. This short story is also about computerized reservations systems as symptomatic of a larger trend towards a new scaling-up of passenger relations as air travel became mass transit in the jet age.

Reservations had long been a problem for TCA's public relations. The most popular reservations system, used by TCA and other large airlines in the 1940s and 1950s, used teletype and telephone. Major hubs such as Toronto were connected to local sales offices and, much like a children's game of "telephone," there were many opportunities for the system to break down. First, because the data were displayed visually on hardboard wall charts and updated by either manual re-writes or color-coding, availability and a passenger's ability to book their ticket was determined by their reservation agent's sight lines to the display board. It also meant that the size of reservations staff was limited by those same sight lines, making booking a long and repetitive process; *Flight* magazine mentioned in 1959 that one unnamed airline "provides reservations clerks with binoculars to allow them to contemplate the far-distant flight control board," along with other "strange devices" to keep up with reservations in the jet age.[732] Another major issue

[731] Hughes, *Networks of Power*, 80.
[732] John Vardalas, *The Computer Revolution in Canada: Building National Technological Competence* (Cambridge: MIT Press, 2001), 121-122. J.C.S, "Jet-Age Airline Reservations," *Flight*, March 13, 1959, 354.

was speed, as once a flight was full and the "stop sale" message had been sent out to ticket agents, there could be a long delay before all agencies received the message and stopped selling tickets, leading to overbooking and disgruntled passengers. Sometimes those delays were as long as six hours, which led to ticket agents withholding a small number of seats to allow for cancellations and last-minute requests, but this too was far from ideal and was not a permanent solution as the "big jets" loomed on the horizon.[733] Like other airlines in the 1950s, TCA was growing rapidly—the fleet expanded by one-third, passenger capacity by 90 per cent, and passenger demand had more than doubled between 1952 and 1955—and the ad-hoc workarounds for its reservations weak points were providing diminishing returns.[734]

Although this was not an issue entirely unique to TCA, the airline's critics used its reservations weaknesses to argue that TCA was becoming complacent thanks to its public ownership. Passengers and parliamentarians alike believed that domestic competition would keep the airline "on its toes," so to speak, and re-orient TCA away from buying the latest planes and towards shoring up its passenger base. "I think TCA needs some competition," complained one passenger after her family's reservation was mistakenly cancelled.[735] Others suggested that "there is nothing wrong with TCA that good competition wouldn't cure" and that "competition is very healthy and TCA doesn't have any!" in their comments to the airline.[736] One of the legislative arguments for either privatizing TCA or introducing domestic competition was that the airline was gaining a reputation of being what MP W. B. Nesbitt called "best in the air, worst

[733] Pigott, *National Treasure*, 426 and Smith, *It Seems Like Only Yesterday*, 216.
[734] Alan Dornian, "ReserVec: Trans-Canada Air Lines' Computerized Reservation System," *IEEE Annals of the History of Computing* 16:2 (1994): 31.
[735] "What Others Think of Us: Say Again?" *Between Ourselves*, October 1951, 3.
[736] "What Others Think of Us: One Point of View," *Between Ourselves*, June 1952, 3. "What Others Think of Us: No Competition," *Between Ourselves*, May 1952, 3.

on the ground." His constituents complained to him about unnecessary, unexplained delays that seemed "to happen more frequently with Trans-Canada Air Lines than with other air lines."[737] Another MP added that disembarking passengers were treated "like a bunch of cattle" at the Malton airport and that "a little more competition" would "improve the service."[738] This was, of course, not the only reason critics believed TCA needed competition or privatization, but the focus on reservations and service suggests that there was a fundamental rift between TCA's critics and supporters about what a state airline was *for*. If it was a public good, as McGregor and Howe believed it to be, then competition would be like having "two sources of lighting supply, two sources of sewage disposal or two sources of garbage collection" in the same municipality, which "doesn't make good economic sense," as McGregor told the Air Transport Board in the late 1950s.[739] Competition would therefore disrupt TCA's ability to provide effective public infrastructure. If, on the other hand, it was a monopoly funded by the taxpayers, then competition would keep TCA healthy by limiting unsustainable growth, unnecessary expenditures, and mistreatment of consumers.

This was also a regional issue. Large cities in Ontario and Quebec were well-served by TCA's most advanced aircraft and services, but points West were not. As mentioned above, TCA DC-3s continued to service smaller towns and cities in the Prairie provinces, but were on borrowed time. The press reported in 1960 that it was only with "some reluctance" that TCA was planning to replace the DC-3 with Viscounts, rather than eliminating the routes entirely in the jet

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[737] Canada, *House of Commons Debates*, March 6, 1956 (W. B. Nesbitt), http://parl.canadiana.ca/view/oop.debates_HOC2203_02/776?r=0&s=1.
[738] Canada, *House of Commons Debates*, March 6 1956 (G. K Fraser), http://parl.canadiana.ca/view/oop.debates_HOC2203_02/776?r=0&s=1.
[739] Quoted in Susan Goldenberg, *Troubled Skies: Crisis, Competition and Control in Canada's Airline Industry* (Whitby: McGraw-Hill Ryerson, 1994), 19.

age.[740] Furthermore, the West was also served by Canadian Pacific Airlines (CPA). Founded in the early 1940s as the air arm of the Canadian Pacific Railway, much as TCA had come out of the CNR, CPA was another direct descendant of the bush flying industry. Instead of flying east-west along the trans-Canada airway, however, CPA continued to work in what might still have been considered "bush" territory, serving communities along north-south axes in Canada's western provinces that fed into TCA's trunk routes. Its first president, long-time CPR executive Edward Beatty, almost immediately proposed merging CPA with TCA, as he saw their services as complimentary and equally important to physical and discursive nation-building, and began applying for route licenses along the airway in the late 1930s. The CPR's attempts to secure a foothold in the Canadian aviation landscape proved unsuccessful. Beatty, the loudest voice in favor of amalgamation, died partway through the process. Despite a $7 million investment in these feeder lines by buying up the routes and fleets of smaller bush flying companies, CPA was essentially cut out of any national aviation schemes by Howe and TCA's board, who were concerned about merging its then-profitable enterprise with CP's struggling one. Under Howe's advisement, Prime Minister Mackenzie King announced TCA as the government's "chosen instrument" for transcontinental and overseas travel in April 1943, just in time for TCA to begin flying as the CGTAS.[741] CPA was barred from flying any of the same routes as TCA and was limited to a small number of routes left over from its bush flying days.

These limits were met with resistance by CPA's postwar president, former bush pilot Grant McConachie, who took office a year before McGregor at TCA. By all accounts a gregarious, charismatic leader, McConachie pushed the government for expanded routes,

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[740] John Miller, "Turns to Turbos: TCA Plans to Give Up North Stars, DC-3s," *The Globe and Mail*, November 7, 1960, 30.
[741] Nerbas, *Dominion of Capital*, 232-234. See also Goldenberg, *Troubled Skies*, 8-9.

obtaining its first international route (Vancouver to Sydney, Australia) in November 1948.[742] As a state airline, TCA essentially had first pick of international routes, and McGregor's experiences with TCA Atlantic and the financial turmoil of the late 1940s meant that he "had no yen for marginal air routes," as McConachie's biographer Ronald Keith suggests. Because "his credo was expansionist," McConachie and CPA snapped up unprofitable routes through the 1950s, including all trans-Pacific flights and a Montreal-Amsterdam route, and in 1957 TCA's monopoly began to crumble.[743]

Social historian Don Nerbas argues that this was largely because of the Canadian political climate; after 22 years of Liberal leadership in Parliament (with Howe as TCA's staunchest defender), a Conservative Prime Minister was elected in 1957 and Howe lost his seat. New Prime Minister John Diefenbaker did not share Howe's "philosophy of strategic government intervention" geared toward using the state to fine-tune national growth by focusing on particular industries, and instead opened limited transcontinental flights to CPA.[744] Although it did not advertise the same way TCA did in the 1950s—McConachie preferred word-of-mouth and promotional stunts such as giveaways—CPA was dismantling not only TCA's monopoly on air routes but also its monopoly on aviation discourse in Canada.[745] By the late 1950s, as TCA was bringing in its "giant jets," putting out "Progress Reports," and dodging questions about its shoddy passenger service, the specter of competition in earnest was looming. Passengers west of Winnipeg had been served by multiple Canadian airlines since the interwar years, so their

[742] Goldenberg, *Troubled Skies*, 10-11.
[743] Ronald A. Keith, *Bush Pilot with a Briefcase: The Incredible Story of Aviation Pioneer Grant McConachie* (Vancouver: Douglas & McIntyre, 1997), 289-290.
[744] Nerbas, *Dominion of Capital*, 234-235, Ashley, *The First Twenty-Five Years,* 56-57.
[745] For example, McConachie allocated less than one per cent of CPA's revenue to advertising in 1950. Goldenberg, *Troubled Skies*, 12 and Keith, *Bush Pilot with a Briefcase*, 272-273.

perspective was different than those from large cities in the East. TCA's loudest critics came from the West, who instead relied on Vancouver-based CPA to serve their air transport needs. Why did the state need to support TCA, they wondered, when their communities were being served perfectly well through private enterprise? Although it still had the financial support of Parliament, TCA finally had to grapple with those new perspectives as CPA's routes began infringing on its own.

ReserVec worked well as a response of all of this. First, it could remedy TCA's service woes, which had the added benefit of showing that it could continue to innovate without other airlines to keep it on its figurative toes. There are two sets of assumptions that can be made about TCA's responses to its monopoly. The first is that TCA was always on the offensive because it could experiment with cutting-edge technologies such as turboprop engines and computers without fear of failure. An expensive risk could mean the end of an airline in free markets such as the United States, but TCA had a guaranteed line of support and could therefore try new things. This argument also works in reverse, as TCA needed to constantly defend its state status through these innovations. They were proof that competition was not a necessary condition for continual technological improvement. Given that ReserVec beat its closest competitor by approximately two years, it served both of these approaches to competition. "Worst on the ground" could be reframed as "first on the ground" and the introduction of computers could demonstrate the airline's devotion to passenger relations. It also suggested that as public enterprise, TCA was best suited to patronize and foster Canadian technological development. Its $3.25 million contract with Ferranti-Packard gave the firm "the cash, the technological

opportunity, and the credibility" to create Canada's first general-purpose computer.[746] This was great for TCA's optics as well; McGregor bragged about the "triumph of electronic engineering on the part of our own technical staffs, working in conjunction with technical groups outside the company."[747] Promotional material and press coverage emphasized the idea that TCA was working with a Canadian firm to make a Canadian computer, implying that early computing could and should be a state-supported effort. From a public relations point of view, ReserVec helped TCA self-legitimize as a state airline, Ferranti-Packard self-legitimize as a private firm, and both self-legitimize as necessary parts of the modern Canadian communications landscape.

Like other North American and European airlines, TCA began experimenting with automatic reservations in the late 1940s, using mechanical systems developed during the war. TCA hired communications engineer Lyman Richardson in 1949 to experiment with the University of Toronto's Ferut computer, manufactured by Ferranti in Britain, but it was unable to perform in real time, which was vital for airline reservations.[748] Based on Richardson's report on his work with Ferut, TCA concluded that whatever it eventually implemented required what Canadian computing historian John Vardalas has called "a fusion of computation, communication, and human interface considerations."[749] This "unique and bold" fusion was precisely what Ferranti Canada had done with their Digital Automated Tracking and Resolving (DATAR) system, developed with contracts from the Royal Canadian Navy and the Defence

[746] In fact, the other early experimenter with computerized management, through Ferranti Canada, was also a state agent: Canada Post. Vardalas, *The Computer Revolution in Canada*, 138-140.
[747] McGregor, *The Adolescence of an Airline*, 127.
[748] Dornian, "ReserVec," 31-32.
[749] Vardalas, *The Computer Revolution in Canada*, 129.

Research Board through the middle part of the 1950s.[750] DATAR had been built very quickly—it had gone from proof-of-concept to working prototype in less than four years—but the effort required to implement it and the waning interest in large military projects after the Korean War meant that the military saw "little merit" in implementing it.[751] However, the lessons learned from DATAR helped Ferranti Canada's successful bid to TCA by foregrounding the human-machine interface rather than the most complex part of the system (the central computer). At TCA, the reservations agent was the pivot point between passenger and airplane, and therefore their communication with the computer was the most important aspect of any booking system.

Ferranti Canada pitched the idea of the "Transactor," based on Richardson's observation that ticketing agents wrote down information on scraps of paper as they spoke to passengers on the telephone. To use the "Transactor," agents would mark booking information on a pre-printed card with a pencil, which they would then insert into the machine. The card would be pressed against a reading plate equipped with sensors that would detect the conductivity of the graphite pencil lead and send the information to the central computer. The central computer would then indicate availability by punching out a pre-printed mark on the same card. The whole process took approximately five seconds. Six "Transactors" were hooked up to Ferut to demonstrate the viability of the system to the TCA executive and board in October 1957.[752] The demonstration was sufficiently novel to be picked up by the *New York Times*, which emphasized the "immediate" and "up-to-the second" real-time aspects of the new system.[753] It also impressed the

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[750] Norman R. Ball and John Vardalas, *Ferranti-Packard: Pioneers in Canadian Electrical Manufacturing* (Montreal and Kingston: McGill-Queen's University Press, 1994), 227.
[751] John Vardalas, "From DATAR To The FP-6000 Computer: Technological Change in a Canadian Industrial Context," *IEEE Annals of the History of Computing* 16:2 (1994): 24.
[752] Vardalas, *The Computer Revolution in Canada*, 131-133, Dornian, "ReserVec," 36-37.
[753] "Electrons Speed Air Reservations," *The New York Times*, October 27, 1957, S15.

TCA executives, who authorized $3.25 million for construction of the "Transactors" and "Gemini" central computer by 1959 despite pressure from IBM. IBM had been working on the SABRE system for American Airlines, but in a "bold" move that "took courage," TCA chose to work with a Canadian company. In their history of Ferranti-Packard, Vardalas and historian Norman Ball argue that this choice helped establish Ferranti Canada as a major player in computing and emphasizes the critical role that the state has had in the development of Canadian technology and enterprise.[754] The name "ReserVec" was chosen from an employee contest in 1960, installation and testing began in the spring of 1961, and full-scale operations began in January 1963.[755]

The themes of TCA's ReserVec-related promotional material were three-fold and very much related to the airline's larger issues with self-legitimation and the state. First, the computerized reservation was used as proof that the airline was taking its passenger relations seriously. Reservations were placed alongside paradigm-shifting technologies such as turbine engines to "make the point that TCA is planning to bring Canadians better service on the ground as in the air."[756] Giving it the "Progress Report" treatment in 1957 was just one way to cement the idea that at TCA, the jet age encompassed much more than just "jets." The speed-up of the jet age required all-new infrastructure, "so TCA is...making use of the modern miracle of electronics. Reservations offices across the continent would be connected directly with a giant electronic 'brain'...completely automatic, able to plot every seat on every flight months in advance, to give flight information and make reservations, *in seconds*."[757] This was an important

[754] Ball and Vardalas, *Ferranti-Packard*, 245-246.
[755] Dornian, "ReserVec," 34.
[756] Memorandum by J. A. McGee, "Institutional Advertising—1957," June 7, 1957, Air Canada Collection 005.005 Box 07, CASM.
[757] Ad. 6-192-I, 1957, Air Canada Collection 005.005 Box 07, CASM.

aspect of the "Planning Year" according to McGee, and looking ahead to TCA's new reservations system would show that the airline "is capable of keeping in step."[758] Furthermore, painting TCA as consistently forward-looking connected electronic reservations to the rest of the Canadian aviation imaginary, as a 25th anniversary advertisement reminded passengers. "TCA's responsibility, of course, has been linking a huge, thinly-populated country tightly together," it claimed. Part of that responsibility was that it had to be "always alert to new concepts" and was therefore "applying miracles of electronic science to improve passenger service."[759] Putting ground services on par with the other changes at TCA showed that the airline did not need competition or deregulation to continue to innovate on both fronts and that overhauling the reservations system was just as important as buying the latest aircraft. "The standards demanded by the jet age," as one 1958 newspaper advertisement called them, required a well-rounded approach to the entire air travel experience.[760] By developing and installing a pioneering computerized reservations system, TCA had a concrete example with a catchy portmanteau name of its devotion to its passenger base of Canadian taxpayers.

The "Progress Report" was released a good half-decade before ReserVec was operational, so it relied on vague retro-futuristic imagery—lines, graphs, squares—that evoked "science" and "technology" to make the airline seem like the cutting edge in passenger service. This is suggestive of the second theme; like the North Star's pressurized cabin before it, ReserVec was painted as both magical and mundane, a science-fiction future and an everyday present. It was common in 1950s and early 1960s advertising rhetoric to refer to computers as "electronic

[758] Memorandum by J. A. McGee, "Institutional Advertising—1957," June 7, 1957, Air Canada Collection 005.005 Box 07, CASM.
[759] Display Ad. 12, "Leadership," *The Globe and Mail*, December 27, 1962, 8.
[760] Display Ad. 13, "1958," *The Globe and Mail*, May 11, 1959, 4.

brains," as TCA's advertisements did. It was also common to focus on the machine itself, backgrounding the labor necessary to build and run it.[761] This meant, like other modern technologies including airplanes, that computers were black-boxed and potentially scary to the modern consumer. This was less of an issue at TCA, as the airline was not selling computers in and of themselves, but it still had to project that it was comfortable with computers and keeping up with the most modern developments in passenger service. Promotional material that featured ReserVec therefore walked a fine line between explaining how the system worked in order to demystify it and maintaining that mystique in order to make it seem exciting and new.



Figure 18: A Ferranti-Packard advertisement for ReserVec in the *Globe and Mail*, September 1, 1962.

Once the system was in place at TCA, advertisements in which it was featured frequently explained in simplified terms how it worked. For example, Ferranti-Packard took out a congratulatory advertisement focusing on both the 25th anniversary of the airline and "the initial implementation of your ReserVec system." The ad (Figure 18) showed pictorially the process of reserving a seat with TCA: first the agent prepares the marked card and inserts it into her "set," and then "your request is transmitted to a computer located in Toronto" capable of confirming the reservation in "2 seconds."[762] A TCA advertisement from 1963

[761] Marie Hicks, *Programmed Inequality: How Britain Discarded Women Technologists and Lost Its Edge in Computing* (Cambridge: MIT University Press, 2017), 103-106.
[762] Display Ad. 51, "Congratulations TCA," *The Globe and Mail*, September 1, 1962, 24.

explained how the "Transactor" and main ReserVec system "'talk' constantly to one another." ReserVec was characterized in that same ad as "TCA's private genie," a "remarkable device," and a "Canadian-made electronic 'Aladdin's Lamp.'"[763] The 25th anniversary promotion discussed above mentions the "miracles" of electronics. ReserVec's black boxes had to be both maintained and forcibly opened if passengers were to accept it as equal parts common to their air travel experience and a symbol of TCA's jet age innovation.

The third theme, although not applied as deliberately as the others, hinted at the type of service TCA would continue to offer in the jet age. As discussed in Chapters 2 and 4, TCA had long featured women in its advertisements and imagined woman travelers as a more-or-less discrete demographic for its services. TCA's reservations agents were often women, as their work was considered largely clerical and was therefore gendered female, and their smiling faces and characteristic hands-free telephone headsets were staples of TCA's promotional material. Advertisements suggested that reservations agents would care for passengers and that they acted as a sort of matchmaker, pairing up passengers with the flights best suited to their needs. In a system campaign from late 1957—just after TCA publicly announced that it was developing computerized reservations—a smiling agent in a calm but busy office "makes a thousand dates." Armed with a headset and a pencil, "her job is to do everything possible to get you on the flight you prefer, to give you a pleasant start to your journey...You're dealing with someone who knows air travel intimately, who will make every effort to fulfill your wishes." Aside from a brief mention of the "streamlined electronics systems" that the airline was developing and the fact that it uses photography, this advertisement would not have been out of place a decade

[763] Display Ad. 85, "TCA's Private Genie," *The Globe and Mail Magazine*, October 5, 1963, A24.

before.[764] The model for the ad was a real member of TCA's reservations staff in Montreal, who McGee thought "symbolize[d] efficiency and friendly service" and would "enable the general public to visualize the 'behind-the-scene' operation" of the airline.[765] Once ReserVec was implemented in the early 1960s, women continued to feature prominently. As Marie Hicks has recently shown in their work on women and computing in Britain, advertising and promotional images for computers almost always showed women as examples of "how it might look to use a computer, humanizing opaque, intimidating, and potentially confusing machines."[766] Again, TCA was not selling computers, but ReserVec agents worked as a sort of bridge between the cutting-edge technological and service-based public images of the airline. Reservations agents were shown taking orders over the telephone, sending their punched card signals to the mainframe, and turning its response into a paper ticket; passengers did not interact with ReserVec themselves, but instead would see a change in their interactions with human service agents. As stewardesses did for the airplanes themselves, reservations agents using high-tech machines gave a human face to modern technologies that might seem threatening to everyday passengers. TCA could have all the high-end jets and computers it could afford, but it could not forget that it moved people as well as airplanes.

Selling ReserVec as equal parts modern technology and human experience allowed TCA to prioritize both of those aspects of air travel in its public-facing material, hinting that a monopoly might encourage innovation and attention to service rather than stifle it. Subsequently, the story of ReserVec is a window into TCA's crumbling hold on Canadian aviation discourse in

[764] Ad. No. 7-180-I, December 1957, Air Canada Collection 005.005 Box 07, CASM.
[765] I wish I knew her name. Memorandum by J. A. McGee, "Institutional Campaign - Canada," December 9, 1957, Air Canada Collection 005.005 Box 07, CASM.
[766] Hicks, *Programmed Inequality*, 112.

the jet age. Not only were passengers and politicians increasingly critical of the airline, seeing through its triumphalist narratives and suggesting that a state airline might not be in the best interest of Canada's geographic realities, but regional competition was nipping at TCA's heels. Developing a real-time electronic reservations system using one of Canada's first general-purpose computers helped TCA stand out from its actual and discursive competition. It added ReserVec to its long list of "firsts" in the jet age to help justify its public status—CPA certainly could not have afforded the expense and risk—and emphasize the role of state enterprise in Canadian technological development. Airplanes were no longer the only technology that TCA had to try and fold into its rhetoric of space and nation, and even then "space" and "nation" meant something very different in the 1960s, as will be discussed in the next short story.

Jet-Age Sun Destinations

There were a lot of similarities between TCA's sun destination advertising in the piston era and in the jet age. For example, the airline maintained many of its graphic design strategies, such as using saturated colors, incorporating photographs, and making frequent uses of "sun" in images and copy. A late 1957 southern destination brochure with the tagline "Fly South," for example, featured "what we consider to be typical illustrations for such areas," McGee wrote in his release memo.[767] Haloed by a yellow sun, a photorealistic woman in a bathing costume is helped off of a pool deck by her male companion; their positioning, with her body facing the reader and the majority of his body obscured by the water, echoes the Florida campaigns discussed in Chapter 4. A direct mail campaign from the same season used a "novel approach"

[767] Memorandum by J. A. McGee, "'Fly South' Folder English & French," 24 December 1957, Air Canada Collection 005.005 Box 07, CASM.

by mobilizing some animal mascots.[768] "Why bear the winter?" asked one, in which a cartoon bear prepares to hibernate until he learns of TCA's southern services. He eventually finds himself dozing against a palm tree wearing swim trunks and sunglasses as a Lockheed Super Constellation flies across the sun overhead. Another mailer featured a trio of birds modeling proper migration behavior: heading south by TCA with suitcases and cameras in tow. Not only does the Super Constellation fly across the sun, but the "o" in "South" is a stylized sun.



Figure 19: "Florida," 1957.

Perhaps the most overt example of these three techniques—color, suns, photography—is in a national brochure from 1958. The cover is dominated by the name of the destination, Florida, in large red letters, with the "O" replaced by an anthropomorphic smiling yellow sun (Figure 19). "Using the sun as the 'O' for extra impact" McGee claimed, would help the brochure "stand out in literature racks," as would the "bright colours, typical of Florida and Southern climes." The remainder of the brochure's cover is taken up by a photograph of a couple waterskiing in red and yellow bathing costumes. "Colourful shots of typical scenes," such as palm trees and beaches make up the rest.[769] The brochure implored travelers to "winter in the Sun," since "Even Old Mr. Sun spends the winter in Florida!"

[768] Memorandum by J. A. McGee, "Southern Services Direct Mail Program," 18 January 1957, Air Canada Collection 005.005 Box 07, CASM.
[769] Memorandum by J. A. McGee, "Florida Promotion Folder English and French," 21 January 1958, Air Canada Collection 005.005 Box 08, CASM.

> "That's a pretty bright idea when you stop to consider the icy prospect of another long, cold Canadian winter. Snow and sleet...slippery streets...bitter, biting North wind! Brr...Who wouldn't trade all this in a minute for days of lazy, lying around on Florida's sun-baked, sandy beaches...Best of all, you can be in the heart of this sun and fun-filled land in just a few hours...simply fly in comfort—*non-stop*—by TCA...And why shouldn't you? Winter is so far away...and you're in Florida!"[770]

Although this brochure features all the typical early-1950s graphic cues, the copy betrays its jet age vintage and highlights the major shifts in the airline's sun destination strategies that are the focus of this section: emphasizing the transformative power of jets, the emergence of Florida as a key "sun destination," and the eventual displacement of "time travel" as a discursive strategy by constructing Canadian winters as unpleasant, uncomfortable, and worth escaping.

As many other advertisements did in this period, promotions for flights to Florida and the Caribbean evoked "magic carpet" imagery when describing the method of travel.[771] In the jet age, however, the carpets were even more magical. They went faster and further, carried more passengers, and soared through the air without so much as a spinning propeller to betray the effort necessary. They also increasingly flew non-stop to sun destinations, reinforcing their roles as transformative machines. As an early 1960s newspaper advertisement suggested, warm-weather vacations were one of the "luxuries of the jet-age world."[772] In late 1958, TCA's *In*

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[770] Adv. 44763, 1958, Air Canada Collection 005.005 Box 08, CASM. At least 20,000 copies of this brochure were printed: 15,000 in English and 5,000 in French. I was only able to find the English version.

[771] TCA actually used the term "magic carpet" to describe their packaged vacation tours to southern destinations, but had to stop in 1961 for legal reasons. The only evidence of this I could find is a note sent to travel agents reminding them of the "Court Injunction prohibiting both current and future use of the term," so I am not certain why. Regardless, the idea that jets worked as if by magic continued to resonate.
Memorandum from G. E. Gray, 23 January 1961, Air Canada Collection, CASM.

[772] Ad. No. 2-301 SS(S), January 1962, Air Canada Collection 002.002.001, CASM.

Flight magazine featured a history of Caribbean travel and considered "the advent of the four-engined airliner in the late '40s" as responsible for a postwar surge in southern vacations because it had "the range and speed to bring the islands to the very doorsteps of those who were seeking a new travel interest."[773] If the North Star was powerful enough to discursively move entire islands closer to Canada, jet-age advertisements claimed, imagine how much more work a jet could do. The word "jet" itself even did some of this heavy lifting, frequently replacing "fly" as the operative verb in advertising headlines and copy. The tagline "Jet TCA South to the Sun" appeared frequently in newspaper and display promotions through this period, suggesting that the act of "jetting" was more transformative than the act of flying.[774] "Jet South by Air Canada," one mid-1960s newspaper advertisement implored; "swiftly, smoothly, easily, Air Canada jets you to islands of unbelievable charm! Within hours, you're in a world that's out of this world... Whether your tastes are simple or sophisticated, your Travel Agent can help you find an island to suit them—and Air Canada jets you there in hours!"[775] In advertisements like these, "jet" also replaced the word "get," which opened the door for some awkward portmanteaux such as "jetaway" to describe jet-powered getaways to sun destinations. Even the language of jet-powered sun destination travel was different than older rhetoric.

Although "south" remained a catch-all category as it had in the 1940s and 1950s, Florida emerged in particular as a popular warm-weather vacation destination for both Canadians and Americans through the 1960s, largely because it was accessible by car. Historians of tourism agree that the privately-owned automobile and national highway systems, more than any other

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[773] "For the Vacationer: Bright Contrasts in the Caribbean," *In Flight* (Fall 1958): 2-4.
[774] "Jet" translates to "réacté" in French, and made for more difficult wordplay; French translations of "jet south" advertisements would instead say things like "TCA takes you there by jet."
[775] Ad. No. 4152B—SSS, November 1964, Air Canada Collection 005.002.008, CASM.

transportation and infrastructure, modified the travel and tourism habits of everyday North Americans. Travelers wishing for a respite from winter conditions in eastern Canada had been driving to Florida since the interwar period, following the Queen Elizabeth Way super-highway, completed in 1939 and connecting Toronto with Hamilton, Niagara Falls, and the U.S. border, and then the network of American federal highway systems. In fact, Torontonians were able to drive to Florida decades before they were able to drive to Calgary or Vancouver; apparently attracting tourists was a higher priority in modern Canada than transcending the nation's distances by car.[776] In Florida's case, as tourism scholar Godefroy Desrosiers-Lauzon has argued, automobile tourism did not give way to "uncontested domination by airlines," and even at the end of the twentieth century "automobile use by Florida-bound tourists has faltered a lot more slowly than the modernist trope suggests."[777] Traveling to Florida by car in the postwar period was convenient for a number of reasons—costs were lower if traveling with a group, for example, and travelers would not have to rent a car to get around in Florida—and it also encouraged "snowbird" behavior. Rather than squeezing as much leisure as possible into "two weeks," "snowbirds" visited Florida multiple times and spent more time and money there.[778]

Automobility and repeat long-term visits became hallmarks of the modern Florida vacation experience, especially for Canadians seeking a break from their winters.[779] As

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[776] Godefroy Desrosiers-Lauzon, *Florida's Snowbirds: Spectacle, Mobility and Community Since 1945* (Montreal and Kingston: McGill-Queen's University Press, 2011), 60.
[777] Desrosiers-Lauzon, *Florida's Snowbirds*, 49.
[778] In the 1981-1982 winter season, for example, Canadians driving to Florida spent an average of 42 nights there. Desrosiers-Lauzon, *Florida's Snowbirds*, 53.
[779] The establishment of Québécois communities in Florida through the last third of the twentieth century is especially interesting. "Floribec," as the Fort Lauderdale region is occasionally known, has a thriving French-Canadian community, including French-language newspapers, Canadian grocery stores, and performances by popular Québécois artists. See Celia Forget, "'Floribec': le patrimoine culturel québécois en Floride," *Ethnologie française* 40:3 (2010): 459-

mentioned in Chapter 4, this increased access bled into aviation discourse. Canadian tourists were more interested in Florida than the Caribbean, and even though attracting new business from "snowbirders" was considered a lost cause, the airline's public-facing material followed the trends by focusing on Florida. Advertisements for Florida made use of all the regular tropes, including women in bathing suits, beach activities, and palm trees, but with an occasional dose of Florida-specific images. One 1964 series featured a photograph of an anthropomorphized orange wearing sunglasses and engaged in some subtle wordplay: "Winter in warm, sunny Florida appeal to you?"[780] Pithy puns aside, TCA's jet-age sun destination advertising was increasingly Florida-oriented. Internal advertising memoranda even listed sun destinations as "Florida and the Caribbean" instead of "the Caribbean and Florida" as they had in the 1950s.

Although Florida became the key "sun destination" in the jet age, the Caribbean did not entirely disappear from TCA's public-facing material. Through the mid-1960s, Cockfield, Brown began to segment their Caribbean advertising even further, developing print advertisements designed to convince residents of the British and French Caribbean to travel to Canada. These frequently made use of the same rhetoric TCA used to sell Canada to Canadians in the 1940s by resting on Canada's size and geographic diversity. "Think big when you come to Canada," Air Canada claimed in an advertisement bound for Jamaica newspapers. "We've got 4,800 miles of great country coast-to-coast to keep you entertained! Big, bustling cities, wide open spaces, peaceful towns—there's a place and a pace to suit everyone visiting in Canada. We'll give you a big welcome, too."[781] An advertisement that appeared in *Bajan Magazine*

468; Rémy Tremblay, *Floribec: Espace et communauté* (Ottawa: University of Ottawa Press, 2006).

[780] Ad. No. 4036-SSS, 1964, Air Canada Collection 005.002.009, CASM.

[781] Ad. No. 8086-SSN, June 1968, Air Canada Collection 005.002.021, CASM.

highlighted that there was "so much to do" in Canada "from Peggy's Cove in the East to rodeos in the West" and featured a collage of stereotypical Canadian place-images: a bear, a rodeo, a mountain, a First Nations child beside a tipi, and a city skyline. Impressively, the woman passenger pictured in this advertising series is black.[782] Even the centennial was sold in the Caribbean as a year of varied activities in varied locations, from Expo 67, "the greatest World's Fair ever held" in Montreal and the Pan-Am Games in Winnipeg, to golf tournaments, yachting championships, football and track-and-field meets, and even a "moose-calling contest" in Saskatchewan. [783] These descriptions are reminiscent of the varied activities—even including golf and yachting—that TCA used to sell the Caribbean to Canadians two decades before. These examples show the increasing diversity of Air Canada advertising through the jet age, but they also highlight what happens when the key aspects of Canadian environmental identity are focused outward. This is especially obvious in one spring 1968 campaign developed for British and French Caribbean newspapers, which claimed:

> "Canada is air conditioned. Come on up and cool off a bit. We think our Canadian summers are pretty warm. Once in a while the temperature even gets up over 85. We'd call that a scorcher. You'd probably call it balmy. Balmy summer days make whatever you're doing more fun. And when you come to Canada, you'll find lots of fun things to see and do—from the spectacular Rocky Mountains of British Columbia, east across the prairies to Toronto and Montreal...to the beautiful quiet coves of the Atlantic Provinces. The best way to get to Canada is with Air Canada, of course...We'll give you a nice, warm reception."[784]

[782] Ad No. 6030MR-SSN, February 1968, Air Canada Collection 005.002.021, CASM.
[783] Ad. No. 7022-SSN, March 1967, Air Canada Collection 005.002.021, CASM.
[784] Ad. No. 8055-SSN, May 1968, Air Canada Collection 005.002.021, CASM.

This campaign, which was also printed in French with extra references to Quebec, flips Canadian climatic identity. An 85-degree day might be a "scorcher" to a Canadian, but it's a balmy reprieve for a Jamaica or Bermuda local; Canadians were encouraged to warm up to sun destination winters just as Jamaicans were encouraged to "cool off" in Canadian summers.

Advertisements such as these prove that Canadian climates had become a rhetorical tool rather than an active concern for Air Canada advertisers, more stereotype than strategy. So, "if you spend winter like this," posited one 1964 advertisement showing a miserable couple pushing through a snowstorm on an urban street, "spend just a few hours" sitting on a plane with a smiling stewardess, "and enjoy a holiday like this in Nassau or Jamaica...Join the 'Sun Set' aboard a giant AIR CANADA DC-8 Jet!"[785] Like older advertisements, the final illustration in the set showed a horse-drawn buggy and women in bathing costumes, but the reader also saw pictured the miseries of their own winters. As depictions of Canadian seasons became more and more stereotypical, it became more difficult to reconcile them with a century of climatic triumphalism. Subsequently, Air Canada advertisers through the late 1960s had a much easier time dispatching with the delicate balance of time and space used to sell sun destinations a generation before and relied instead on exaggerated depictions of Canadian winters, discursively leaving them behind entirely instead of shortening or fast-forwarding through them.

This is most evident in Air Canada's increased substitution of "summer" with "winter" in its advertising taglines. That is, instead of focusing on the act of time travelling through the seasons to Canadian summer conditions in the Caribbean, advertisements shifted the focus to the uncomfortable winter conditions travellers would leave behind. In keeping with the airline's

[785] Ad. No. 4150B-SSS, November 1964, Air Canada Collection 005.001.032, CASM.

trend towards portmanteaux, for example, a campaign from the 1963-64 winter season (Figure 20) claimed that Florida was "Sunforgettable!"

> "Pack up all your cares and winter woes—then deposit them in the nearest snowbank. Just be sure to bring lots of summer clothes when you head South with Sun (and TCA) away from the miseries of cold winter weather. This year, swap the season of snow and slush for a session of sun and fun on golden sandy beaches of fabulous Florida—the land where ice comes in a cube and tall glass—*not* in a storm!"[786]

The emphasis was on what passengers might leave behind, deposited in the nearest snowbank. An advertisement from the same season, which did not improve on the wordplay with its tagline about a "Floridandy winter holiday," suggested that travelers "kick off your overshoes. Take off your winter overcoat. Settle down and be spoiled by Air Canada."[787] Another series, this time of small 2-column 100-line newspaper advertisements, featured simplified black-and-white illustrations of technologies Canadians used to separate themselves from their winters and how

[786] "Sunforgettable" was translated into French as "étéifiez l'hiver," a pun so obtuse that it was literally defined under the headline as "to make resemble summer; a word that [dictionary complier] Littré did not know, but would surely have appreciated!"
Ad. Nos. 3075-SSS and 3075F-SSS, 1964, Air Canada Collection 005.002.009, CASM.
[787] Ad. No.4159-SSS, November 1964, Air Canada Collection 005.002.008, CASM.

they might shake off the yoke of those technologies. A standing radiator and thermostat, for example, was paired with the command "this winter, turn it down and go South." [788]



Figure 20: "Sunforgettable" in English and French, 1963-1964.

As was the case with North Star-era advertising, the trappings and symbols of winter were discursively exchanged for those of summer, but with an added sense of urgency and permanence. Once passengers took off their overshoes and experienced winter in Florida, they might never put their overshoes back on. One series, from late 1967, featured a photograph of a couple sitting back-to-back on the beach (Figure 21). The woman, not surprisingly, is wearing sunglasses and a bikini and facing the camera; we only see her guitar-playing male partner from behind. "How you feel about winter often depends on where you sit," the advertisement claimed, with the implication that the only way to "warm up to winter" was to "lean up against a friendly

[788] Ads. No. 4165-SSS and 4164-SSS, November 1964, Air Canada Collection 005.001.032, CASM.

back and relax...and let the sun bake you brown."[789] That is, the only way to enjoy winter was to spend it in a place that was not Canada. Another advertisement from the same season introducing Air Canada's daily non-stop service to Miami, asked "how could a numb-fingered, bone-chilled, slush-splattered, puddle-hopper become a winter-lover in just a few hours? By flying non-stop...to Miami with Air Canada." Here was another bikini-and-sunglasses-wearing sunbathing woman, but this time sandwiched between a picture of the same woman in a winter coat struggling against a blizzard and the sleek DC-8 that had whisked her away to Miami. "It's easy to be a good sport about winter," the advertisement claimed, when you could spend it with the "best winter sports" who were already in Florida.[790] Apparently, the Canadians who knew winter best knew to spend it elsewhere.

The allure of the tropics, always present in TCA's sun destination promotions, was therefore accompanied during the jet age by an imagined urge to get *away* from Canadian winters. Winter was painted as a sort of disease of ennui, for which Air Canada had a cure: "6 jets a day to keep winter away. All non-stop!"[791] The airline assigned itself and its jets pseudo-medical expertise that instantly solved everyday Canadians' most urgent problems with winter, an extension of older climate-and-health rhetoric that transferred the curative properties onto the transportation itself. For example, Air Canada self-fashioned as an "Escape Specialist," as one French-language campaign from 1969 called it, taking Canadian travelers away from both the "problems of other methods of transportation" and the problems of their imagined winters.[792] In so doing, the airline constructed its sun destinations as different from the other places it flew. It

[789] Ad. No. 7106B-SSS, September 1967, Air Canada Collection, CASM.
[790] Ad. No. 7120C-NAM, Air Canada Collection, CASM.
[791] Ad. No. 8092-NAM, September 1968, Air Canada Collection 005.002.028, CASM.
[792] Advertisement, "Spécialistes de l'évasion," April 1969, Air Canada Collection 005.002.035, CASM.

even created an "imaginary" society of "sun-worshippers" in the late 1960s who understood the allure of the tropics: "Club Calypso."

Being a member of "Club Calypso" meant that you understood firsthand how "different" the tropics could be. However, unlike the difference evoked by piston-era sun destination advertisements—a difference in time and speed—the jet-age differences between the tropics and Canada had the potential to physically change club members. One French-language 1964 advertisement showed a couple giggling conspiratorially as they disembarked from a plane carrying cameras and wearing straw hats. Although it was printed in black-and-white, this ad was meant to show that "the tanned faces you encounter this winter are all coming back from sun country. If you feel too 'pale faced' and a bit jealous, it's your turn" to fly Air Canada.[793] Tanning, as historians of the body, medicine, and tourism have shown, had been used as a sign of status and mass leisure in the Americas since at least the late nineteenth century, but ballooned in popularity after the 1940s thanks to the postwar travel boom and the influence of movie stars and mass-manufactured cosmetics. Oils and lotions meant to encourage tanning (the sales of which doubled in America between 1951 and 1956) and sunless tanning products such as UV lamps were hallmarks of the mid-century obsession with tanned skin as was, of course, the growing discourse of the tropical vacation.[794] In the Canadian context, the contrast between sandy summer bronzes and snowy winter whites was especially noticeable, and Air Canada promotional material used the contrasts in skin tones to its advantage to make the allure of Florida and the Caribbean even more visually appealing. The winter 1957-1958 animal-mascot direct mail campaign included Casper the Caterpillar, who despite his small size ("caterpillars

[793] Ad. No. 4156F-SSS, November 1964, Air Canada Collection 005.001.032, CASM.
[794] Coppertone, for example, was first sold in 1944. Kerry Segrave, *Suntanning in twentieth Century America* (Jefferson: McFarland & Company, 2005), 74-77.





Figure 21: Tanning as performative seasonality, 1967 (top), 1969 (bottom).

don't make much mileage in the snow") was able to travel south with TCA. "He's playing in the sun and sand right now. How about you?" one mailer asked. [795] Although likely simply chosen because of the alliteration, invoking the "Casper the Friendly Ghost" character, popular in comics and movies through the 1950s, may have reminded passengers of their own pale faces. The "faces of winter," as a 1969 magazine advertisement called them (Figure 21), had "a happy smile, a healthy tan, a relaxed feeling," and were decidedly not in Canada thanks to the "Come-On-Down-To-Calypso-Country-Airline."[796]

The full-color "faces of winter" ad shows close-ups of Canadian tourists basking on the beach next to locals, reflecting the idea that by bronzing their skins they were somehow becoming more tropical and creating connections to the tropics that physically changed them. Historian Catherine Cocks has argued that using a tropical vacation as an opportunity to tan was a type of "playful experiment in becoming nonwhite" that was both separate from and connected to

[795] Direct Mailer, "My Friend Casper," February 1958, Air Canada Collection 005.005 Box 07, CASM.
[796] Advertisement, "Join the Faces of Winter," August 1969, Air Canada Collection, CASM.

the troubling relationships between Euro-Americans and African- and Indigenous Americans.[797] Tourism promoters in warm-weather destinations such as Florida in the first few decades of the twentieth century suggested that bronzing the skin was a way to recapture a connection to nature and leisure that modern urban life was beginning to eliminate. The term "coat of tan" was frequently used in popular magazines and tourism material, Cocks writes, foregrounding the temporary nature of the tan—affinity with brown-skinned locals was literally only skin deep and could quickly disappear—as well as the uses of tanning as a "seasonal accessory."[798] In the jet age, Canadians had many ways of bronzing themselves, from artificial tanning beds to face and body makeup, but the seasonality of snowbird travel made the real thing much more potent. Not only were Canadians removing their boots and mittens when they flew south with Air Canada, but they were figuratively shedding their skin and returning as a different person. The "Club Calypso" experience was so transformative as to almost be religious; one brochure for the 1970-1971 winter season referred to it as "Air Canada's secret society of sun-worshippers" and added a "warning: each [destination] is out to win your heart and soul—to become your perennial 'place in the sun.' So take heed, hedonists!"[799] Once they drew Canadians in, warm-weather destinations would change them inside and out to the point that they might not let them leave.

What did all of this mean for modern Canadian envirotechnicality? There had always been a folkloric angle to Canadian cold-weather self-fashioning, but by the last third of the twentieth century a suite of modern technological systems was further removing people from the lived experience of winter. Everyday Canadians could divorce the material experience of their

[797] Cocks, *Tropical Whites*, 112.
[798] Cocks, *Tropical Whites*, 110-123.
[799] *Island Vacations Winter 1970/1971* (brochure), RG-70, vol. 117–15.4, Air Canada fonds, LAC.

geography and climate from the cultural aspects that in turn helped to reconcile the apparent contradiction of being a "true north" people while, for example, watching hockey games in heated indoor arenas. As Desrosiers-Lauzon has argued, "Canadian winter, despite its length and its intensity, despite its identity-making function, [and] despite its integration inside popular culture, *is no longer what it used to be."*[800] Jet planes were not the only culprit here. Natural gas became available to heat urban Canadian homes in the late 1950s, for example, and the nation's first indoor shopping mall opened in Vancouver in 1950, but jets were a big, fast, noisy scapegoat.[801] Canadian intelligentsia grappled with how to reconcile winter identity with air travel culture, especially because Air Canada's "giant jets" carried more people than ever south. This struggle was represented in the mid-1970s by concerns about a "travel deficit": Canadians spent more money travelling abroad than foreigners spent travelling in Canada. Newfoundland MP John Crosbie suggested in a 1977 session of Parliament that "all of us have heard of the 'ban the bomb' campaign. What we need is a 'ban the tan' campaign. Every Canadian who dares to go south next winter and returns to Canada with a tan should be ostracized." He graciously added that, "if hon. Members get a tan from the lights in this Chamber, we can explain that."[802]

Although ostensibly he was talking about tourism dollars, Crosbie articulated the jet age concern about how to maintain a national identity based upon geography and climate when they

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[800] Godefroy Desrosiers-Lauzon, "Nordicité et identités québécoise et canadienne en Floride," *Globe revue international d'études québécoises* 9, 2 (2006): 143; my translation. See also Sophie-Laurence Lamontagne, *L'hiver dans la culture québécoise* (Québec: Institut de recherche sur la culture québécoise, 1983).

[801] On central heating specifically, Elizabeth Shove argues that climate control has been part of twentieth- and twenty-first century temporalities of comfort and convenience. "Comfort and Convenience: Temporality and Practice," in *The Oxford Handbook of the History of Consumption*, edited by Frank Trentmann (Oxford: Oxford UP, 2012), 289-306.

[802] Canada, *House of Commons Debates,* October 25, 1977 (John Crosbie), http://parl.canadiana.ca/view/oop.debates_HOC3003_01/254?r=0&s=1.

were so easy to abandon. Desrosiers-Lauzon has connected these state efforts to mitigate the "travel deficit" to the "technological conquest" and subsequent cultural devaluation of Canadian winter, since by the 1970s the prevailing opinion was "that a distaste for winter and a taste for Florida sunshine were evidence of a declining commitment to Canada."[803] This is also an example of the "dialectic" process of modernization that James Vernon discusses in *Distant Strangers*. As the state addressed the problems of governing from a distance by generating "abstract systems of thought and organization," many "failed to trust and were alienated" by them, regardless of their efficacy, and "generated fresh attempts to reembed economic, social, and political relations in person and place."[804] Generating new markers of belonging—pale faces perhaps, or outdoor hockey, or snow-shoveling—as the "speed-up" made the world feel increasingly impersonal and abstract was a way to make sense of Canadian modernity.

Conclusion: The Shrinking of the World and the End of TCA

In a speech to the Montreal Rotary Club in 1959—between the introduction of the Viscount and the "big jets" and as TCA was well on its way to developing ReserVec—Vice President of Traffic Gordon Wood reflected on what jet travel would do to both Canada and the rest of the world:

> "Air transport has been shrinking the globe to the point where the world, in terms of traveling time, is smaller today than Canada was twenty years ago. At this moment, Tokyo is as close to Montreal as Winnipeg was in 1939. Tomorrow, or 18 months from now when the big jets are in full operation throughout the world, there will be few places on the face of the globe more than 24 hours away from one another...The great

[803] Desrosiers-Lauzon, *Florida's Snowbirds*, 214, 219.
[804] Vernon, *Distant Strangers*, 128-129.

transnational destinations of most travelling Canadians will be a comfortable nap's distance between lunch and dinner."

"In the context of Canadian history," Wood said, it is "not surprising" that Canadians have taken to the air in large numbers and become "one of the world's most travelled peoples." What *was* surprising was that because of all of this travel, Canadian enterprise, scholarship, culture, and diplomacy was making its way around the world; "air transport has widened our scope and increased the world's awareness of Canada."[805] This has all the hallmarks of a TCA-boosting speech—perhaps even a John Fisher "pride-builder" report—from the 1930s or 1940s, but with one major change: it is the world, not Canada, that has been reduced to "one day wide."

This was time-space compression scaled-up, sped-up, and extended, since it took only twenty years for the rest of the globe to shrink to the size of Canada. With this expansion and extension came a standardization in the air travel experience. Jet-age airports, for example, became "placeless places," "uninhabited and inauthentic," designed only for passing through.[806] The food was the same, the décor was the same, and the choreographed movement through space was the same. More and more of the air travel experience through the last four decades of the twentieth century was subject to this process, but this consolidation was accompanied by a fragmentation in both passenger demographics and the discourse surrounding air travel. The communications

[805] Speech by W. Gordon Wood to the Montreal Rotary Club, December 8, 1959, Air Canada Fonds RG70, vol. 132, LAC.
[806] Timothy Cresswell, *On the Move: Mobility in the Modern Western World* (New York: Routledge, 2006), 245. The airport as a "placeless place" received considerable attention at the end of the twentieth century; twenty-first century scholars have largely debunked it using examples such as the Portland carpets, the John Lennon-themed Liverpool Airport, and taxi drivers and service workers who *do* "inhabit" airport spaces. See Cresswell, *On the Move*, 220-224 for an overview and Peter Adey, "'Above Us Only Sky': Themes, Simulations, and Liverpool John Lennon Airport," in Scott Lukas, ed., *The Themed Space: Locating Culture, Nation, and Self* (Lanham: Rowman & Littlefield, 2007), 153-166.

technology that was supposed to bind Canada together and to the rest of the world was actually dividing as airport noise pitted cities against the federal government and airlines against their passengers, and TCA's promotional material privileged the allure of international destinations and their fare plans over a single collective vision of nature, technology, and nation. TCA's jet age discourse was splintered partially because, unlike its counterparts in Britain or the United States, there were no Canadian jets of which passengers could be proud.[807]

TCA had done such a god job of making air travel mundane—an arduous task for airlines all over the United States and Europe in the first half of the twentieth century—that it appeared too mundane to support modern Canadian-ness. "Familiarity destroyed Jet Age glamour," argues historian Virginia Postrel, "because Jet Age glamour wasn't about the actual experience of flying. It was about the *idea* of air travel."[808] At TCA, the idea of air travel was intimately tied to what it meant to be Canadian, using technologies to make sense of identity-forming distances and character-building climates, and Canada's jet age therefore reveals the limits, contradictions, and unintended consequences of that idea. Ultimately, jets were *too* modern to support modern Canadian envirotechnicality, leading to the dissolution of TCA's envirotechnical rhetoric and, eventually, the airline itself.

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[807] Jenifer Van Vleck suggests that American-built passenger jets "reanimated aviation's cultural significance as a symbol of American national greatness." The same could not be said of Canada. Van Vleck, *Empire of the Air*, 240.

[808] Virginia Postrel, *The Power of Glamour: Longing and the Art of Visual Persuasion* (New York: Simon & Schuster, 2013), 198-199. Her discussion of the Jet Age, 193-199, is great.

Conclusion

On June 1, 1964, TCA's switchboard operators began answering the telephone with "Air Canada" instead of "Trans-Canada Air Lines" for the first time. This is one of two ways that this project about creating, maintaining, and disrupting the modern envirotechnical nation could end. Because this project has been about TCA, it may seem natural to finish at the point where TCA stopped being TCA. Throughout this project, I have traced a variety of Canadian national symbols that touched on envirotechnical themes. Some of them were deliberately constructed by TCA such as the North Star, and some, such as "Canadian Winters," were already part of Canadian culture. By treating the *name* Trans-Canada Air Lines as another such symbol, discussing the conditions that led to its replacement helps highlight how the seams of modern Canadian envirotechnicality were pushed until they failed. TCA becoming Air Canada was the end of a particular sociotechnical imaginary based on constructions of geography and climate, enterprise, and the state. "Names," linguist Star Vanguri has recently argued, "create cultural narratives via their distribution and circulation, in turn cementing them in public memory in a way that masks them as neutral."[809] In the case of TCA, the names its stakeholders chose were part of the airline's larger public-facing vision of technology, environment, and nation, but were not sufficiently elastic to keep up with high-modern Canada.

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[809] Star Medzerian Vanguri, "Toward a Rhetorical Onomastics" in *Rhetorics of Names and Naming* (New York: Routledge, 2016), 5. For more on onomastics, the study of proper names, and meaning, see Carole Hough, ed., *The Oxford Handbook of Names and Naming*, (Oxford: Oxford UP, 2016), Guy Puzey and Laura Kostanski, eds., *Names and Naming: People, Places, Perceptions and Power* (Bristol: Multilingual Matters, 2016), and Oliviu Felecan and Alina Bughesiu, eds., *Onomastics in Contemporary Public Space* (Newcastle: Cambridge Scholars Publishing, 2013). For aerospace naming practices specifically, see T. M. Pearce, "The Names of Objects in Aerospace," in *Names and their Varieties: A Collection of Essays in Onomastics*, ed. Kelsie Harder (Lanham: University Press of America, 1986), 114-123; and Guy Puzey, "Aircraft Names," in *The Oxford Handbook of Names and Naming*, 605-627.

Despite a public-facing rhetoric that "cemented" the work that TCA as a name (and as an airline) was supposed to do as neutral, the politics of the name "Trans-Canada Air Lines" were questioned almost as soon as it was deployed. It wasn't just that being "trans-Canada" simply did not *mean* anything to TCA's stakeholders by the 1960s, but also that the needs and wants of those stakeholders were changing. The push to change TCA's name was explicitly about language, culture, and the bilingualism debate in mid-century Canada, which had been important to Francophone policy-makers for decades but reached something of a fever pitch in the 1960s. However, like other names at the airline (see my discussion of "North Star" in Chapter 2), it was also framed by TCA's technological choices and questions about the government's responsibility to its citizens. Both of the airline's names reflected what a state airline was supposed to *do* for Canada in the historical moments in which they were chosen. That is, an "Air Canada" Canada and a "Trans-Canada Air Lines" Canada were different Canadas, revealing the limits of the envirotechnical imaginaries at the heart of this project.

The official French translation of TCA was the cumbersome "les Lignes aeriennes trans-Canada," and French-language newspapers in Quebec and France began using "Air Canada," modeled after Air France, almost immediately. A 1950 survey of French-Canadian newspapers by Vice President of Traffic Anson McKim found many different variations on the name, including "Trans-Canada," "Air Canada," and "Les Trans-Canada Airlines." There was no real satisfactory solution; neither TCA's official French name nor "Air Canada" was particularly useful and attempts to find a name that worked in both languages and kept the TCA acronym had come up short. Although McKim cautioned against it, TCA began officially using "Air Canada"

on its French material for use in Quebec, Atlantic Canada, and France in the mid-1950s.[810] It often appeared alongside "TCA" in these ads, and was also used in European markets where, as McGregor wrote in his memoirs, "the designation 'Trans-Canada' was virtually without commercial meaning."[811] This exercise had alerted TCA's Public Relations and Traffic managers that they "had not gone far enough in the use of the French language" and that they needed to "create a French atmosphere" in not only advertising, but also ticket offices, mailrooms, and official signage.[812] In April 1953, Howe proposed amending the *Trans-Canada Air Lines Act* to allow the use of "Air Canada" as a "descriptive name" because it had "wide recognition in the French-speaking sections of the country."[813] Despite this, TCA spent the 1950s avoiding any official stance on bilingualism, and when questioned on whether the 1953 amendment meant that TCA was considering a new name, Howe answered with a definitive "No." It was only to protect "Air Canada" and endorse it in the Québécois market.[814] Even when bilingualism was used as a selling point, it was done with disclaimers. A 1960 ad campaign touting TCA's "Welcome-Bienvenue" service as a particularly "Canadian characteristic" for example, was worded carefully "taking care not to imply that complete bilingualism exists across the airline."[815]

Because the name of the airline was enshrined in the *Trans-Canada Air Lines Act*, it had to officially be changed in Parliament. Niagara Falls MP Judy LaMarsh had first suggested

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[810] Letter from Anson McKim to Gordon McGregor, 29 March 1950, Air Canada Fonds RG70, vol. 132, LAC.
[811] McGregor, *The Adolescence of an Airline*, 140.
[812] Letter from Anson McKim to Gordon McGregor, 29 March 1950, Air Canada Fonds RG70, vol. 132, LAC.
[813] Canada, *House of Commons Debates*, April 13, 1953 (C. D. Howe), http://parl.canadiana.ca/view/oop.debates_HOC2107_04/467?r=0&s=1.
[814] Canada, *House of Commons Debates*, April 13, 1953 (C. D. Howe), http://parl.canadiana.ca/view/oop.debates_HOC2107_04/470?r=0&s=1.
[815] Memorandum by J. A. McGee, "U.S. Publication Advertising—'Welcome-Bienvenue' Campaign," 3 August 1960, Air Canada Collection, CASM.

changing the name in 1962 in order to "bring into conformity" the names used "outside the continental limits of this country" with those used in Canada, but perhaps because she was a junior back-bencher the bill did not make it past the first reading.[816] By early 1963 francophone MPs began asking Minister of Transport George McIlraith when and how TCA would begin using "Air Canada" on its aircraft and on other official national platforms in order to "to prove to the world that Canada is a bilingual country."[817] McIlraith or his Parliamentary Secretary would usually bring up the cost of re-painting the fleet and the "misunderstanding and confusion" of air traffic controllers faced with seeing so many names painted on the aircraft.[818] This was only sometimes explicitly linked to actually *changing the name of the airline* and was usually addressed as a case of government spending on frivolities such as aircraft paint. One MP actually suggested that this would all be resolved if "a few members of Parliament bought the paint" and did the work themselves and McIlraith, tongue-in-cheek, declined to comment on the "artistic ability of members of Parliament."[819] The effort to change the name in earnest finally gathered momentum once Jean Chrétien, who would serve as Prime Minister from 1993-2003, revived LaMarsh's idea through his own Private Member's Bill in 1964.[820] This came during a groundswell of Québécois nationalism and questions about how to best represent all of Canada's (Euro)linguistic interests in government and national enterprise.[821]

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[816] Canada, *House of Commons Debates*, November 5, 1962 (Judy LaMarsh), http://parl.canadiana.ca/view/oop.debates_HOC2501_02/259?r=0&s=1.
[817] Canada, *House of Commons Debates*, May 31, 1963 (Maurice Côté), http://parl.canadiana.ca/view/oop.debates_HOC2601_01/504?r=0&s=1.
[818] Canada, *House of Commons Debates*, October 28, 1963 (Jean-Charles Cantin), http://parl.canadiana.ca/view/oop.debates_HOC2601_05/9?r=0&s=1.
[819] Canada, *House of Commons Debates*, July 31, 1963 (George McIlraith), http://parl.canadiana.ca/view/oop.debates_HOC2601_03/840?r=0&s=1.
[820] His first attempt, in 1963, did not get a second reading, but he cleverly brought LaMarsh's bill up for *its* second reading in early 1964 instead, which did the trick.
[821] This, of course, neglects all of Canada's indigenous languages.

It was also tied to the purchase of a new aircraft at TCA in 1963. The airline had narrowed its choices to a French-made Super-B Caravelle and the American DC-9. The eventual choice of the DC-9, as well as the fact that there were no French-Canadians on TCA's board despite its headquarters in Montreal, was construed by Québécois politicians as an affront to French-Canadian interests. McGregor framed this choice in his usual diplomatic way by arguing that the Caravelle was less suited to TCA's needs and Canada's conditions. "It is no business of TCA to be critical of the merits of any aircraft," he wrote in *Between Ourselves* in November 1963, "but it would also seem that each DC-9 bought by TCA will be of greater advantage" than the Caravelle. [822] However, he was caught on a hot microphone during a December committee meeting calling it "no great shakes" and TCA's worst possible aircraft choice. McGregor wrote in his memoirs that this felt like saying "'What an ugly baby!' to its doting grandmother."[823]

This, coupled with other statements from the committee meeting in which TCA's policy of enforcing English proficiency for all workers (including those who did not deal with the public, such as mechanics) was revealed, was the proverbial match that lit the dynamite. Approximately 1000 students marched on TCA's downtown Montreal offices on December 12 chanting "Hang McGregor" and throwing tomatoes and eggs at the building. Some held signs with separatist logos and slogans. McGregor met with student leaders and told the crowd—which had to be broken up by police once it spilled onto Rue St. Catherine during rush hour—that "Air Canada" would soon be seen on airplanes and that "if the program of bilingual publicity...continued in the next two or three years the way it had in the past, 'Air Canada' might become the official

[822] Gordon McGregor, "From the President: The Selection of the DC-9," *Between Ourselves*, December 1963, 2.
[823] McGregor, *The Adolescence of an Airline*, 137.

name."[824] He also clarified his hot-mic comments, claiming that the Caravelle might be "no great shakes" now, but when it was designed a decade prior it was "good for its day."[825] However, the damage had been done; as historian David Meren argues in his book on Canada-France relations, "the comments went to the heart of sensitivities over French Canada's economic marginalization and neo-nationalist determination to develop Quebec's technical capacity and industrial base."[826]

This scandal turned the spotlight towards language and identity issues at TCA, so when Chrétien's Private Member's Bill came up in early 1964, it passed quickly and with little debate in the House of Commons. Even then, the press and some "old-timers," as pilot George Lothian called those who had been with TCA since the beginning, saw the name change as pandering to Quebec's interests and incurring extra costs for what amounted to a cosmetic rebranding of the airline.[827] However, language was not the only issue at stake in changing the name of Canada's state airline. When the bill came to be read in the Senate in March 1964, the sponsoring Senator, Salter Hayden, suggested that:

> "In the beginning, when we established the Trans-Canada Air Lines, such a name for a purely domestic operation may have been perfectly proper. But in these times, with the extent of international operation...it is misdescriptive, in my opinion, to use the title 'Trans-Canada Air Lines.'...I say this is just a case of Trans-Canada growing up, and becoming

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[824] "Friendly Parley: McGregor Meets U of M Students," *Montreal Gazette*, December 13, 1963.
[825] David Oancia, "Angered by TCA, Students Stage Montreal March," *The Globe and Mail*, December 13, 1963, 1-2.
[826] David Meren, *With Friends Like These: Entangled Nationalisms and the Canada-Quebec-France Triangle, 1944-1970* (Vancouver: UBC Press, 2012), 197. For more on the Caravelle and French-ness see Hecht, *The Radiance of France*, 206-207.
[827] In his memoirs, Lothian claimed to "like the new name," but was wary of expressing that opinion lest he upset an "angry old-timer." Lothian, *Flight Deck*, 160. For a letter-to-the-editor on the topic, see R. A. Neale, "French and English," *The Globe and Mail*, March 9, 1964, 6.

> international as well as national...It is very fortunate too that in French and in English you use exactly the same word."[828]

Of course, as I have shown, TCA was international *first*. It wasn't "trans-Canada" until nearly two years after it began operations. But that did not matter; it was the *symbolic* transcontinentality that was fading from public discourse. Like other Anglophone legislators, Hayden saw the bilingual nature of the name and the meaning of being "trans-Canada" as parallel issues. The amendment's loudest critic in the Senate, Prince Edward Island-based Orville Phillips, was particularly concerned with what "Air" and "Canada" might symbolize instead. He felt that "the term Air Canada is meaningless. It could be a radio wave, or a radar wave, and at this time of year it could simply be a cold blast of air from the North Pole. It does nothing to convey the idea of an airline."[829] But it did have a meaning, just not a literal one. "Air Canada" meant a Canada united by language and culture, a Canada that represented the needs of all of its constituents, and a Canada that was willing to keep up with shifting national self-fashioning.

After some prodding from Francophone Senators, Phillips withdrew his objection, the amendment was passed to committee and given Royal Assent at the end of March, and the airline's switchboard operators began answering the telephone with "Air Canada" on June 1. To announce the change, the airline ran a simple advertisement in all major Canadian newspapers in the last few days of May (Figure 22). Almost entirely text save a black-and-white silhouette of a four-engined jet, the advertisement was tinged with "a little nostalgia" and suggested that "it is obvious...that the name '*Trans-Canada* Air Lines' is no longer an adequate description—even

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[828] Canada, *Senate Debates*, March 11, 1964 (Salter Hayden), http://parl.canadiana.ca/view/oop.debates_SOC2602_01/134?r=0&s=1.
[829] But it did—Air France, Air India, Swissair, Alitalia, and Aer Lingus were all mentioned as examples of easily recognizable state airlines with "Air" in the title.

though it was entirely appropriately chosen, nearly three decades ago."[830] Times changed, and so therefore must the name of Canada's state instrument for air travel.

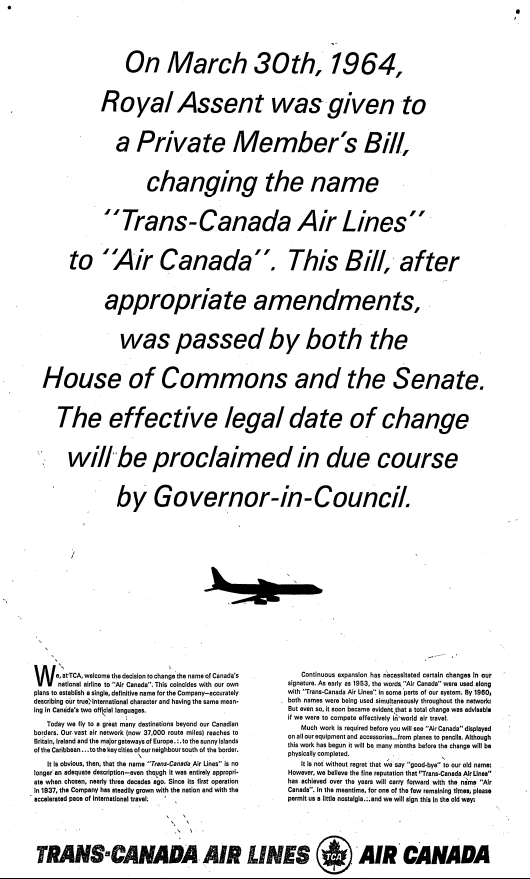

Figure 22: TCA's name-change advertisement in the *Globe and Mail*, May 29, 1964.

The physical conversion programme was gradual. In order to cut costs by approximately $500,000, aircraft were re-painted piecemeal during their regularly scheduled maintenance and promotional material—including brochures, stationery, name-badges for crew, baggage tags, signage, and TCA-branded sugar packets—were re-issued only once stocks ran out. "Trans-Canada Air Lines" did not entirely disappear either. The airline maintained the rights to the old name and logo, which had been replaced by a similar maple-leaf design without "TCA" in the center, in order to prevent their use by another carrier. Furthermore, "to many...there will always

[830] Display Ad. 36, *The Globe and Mail*, May 29, 1964, B14.

be a sentimental attachment to the old name," the *Globe and Mail* reported, such as a customer who, upon hearing an operator answer the telephone with "Good morning, Air Canada," replied:

> "You can call yourselves whatever you like, but to me you'll always be TCA."[831]

Annoyed "old-timers" aside, the new name was met with relatively little fallout once implemented and its role in debates about language rights and Canadian bilingualism policy has been largely neglected by historians. There is a small body of literature on Canadian bilingualism in the 1960s, but it is mostly in relation to Québécois nationalism and culture, language education, and provincial and federal politics writ large, not technology.[832] Although the change was mostly due to French-language rights in Canada and took place in the middle of agitation about Quebec's place in Canadian politics and culture, it is also worth discussing how the version of Canada that "Trans-Canada Air Lines" represented and the version that "Air Canada" represented were quite different. A "TCA" Canada was a "technological nationalism" Canada, one that celebrated a single nation bound *physically* by communications technologies. The collapse and homogenization of Canadian distances by airplanes was framed as a public good, much as nineteenth- and early-twentieth-century rail and telecommunications discourse had done. An "Air Canada" Canada was a Canada united *culturally* by language in which the modern compression of distance was perhaps so mundane as to be taken for granted.

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[831] Beverly Gray, "To Some Canadians It Will Always Be TCA," *The Globe and Mail*, June 6 1964, 23.

[832] See, for example, Matthew Hayday, *Bilingual Today, United Tomorrow: Official Languages in Education and Canadian Federalism* (Montreal & Kingston: McGill-Queen's University Press, 2005), and *So They Want Us To Learn French: Promoting and Opposing Bilingualism in English-speaking Canada* (Vancouver: UBC Press, 2015); Marcel Martel with Martin Pâquet, *Speaking Up. A History of Language and Politics in Canada and Quebec* (Toronto: Between the Lines, 2012).

In this dissertation, I have raised questions about what TCA's Canada looked and felt like in its first thirty years of service. Not just confined to Canada, the high-modern acceleration of time, collapse and globalization of space, and technological intrusions on everyday life were met with concern and anxiety as both state agents and everyday consumers wondered what would happen as it became increasingly difficult to feel a sense of belonging-in-place. James Vernon refers to this as a "society of strangers"; despite high-modern technological systems appearing to bring people closer together, governance and other interpersonal interactions were increasingly taking place from a distance. TCA's public-facing material shows us how these anxieties played out in one particular national context, one where distance was already part of collective visions of belonging. Canada's culture of "bigness" makes the case study in this project especially resonant because the new high-modern elasticity of space was disorienting enough without space in and of itself providing support for the nation. Furthermore, could Canada remain a "true North, strong and free," if sun destination vacations made the seasonal experiences of "North" optional? "Space" in the form of bigness and "time" in the form of seasons had been vital to Canadian self-fashioning for generations before the *Trans-Canada Air Lines Act*, and so TCA was forced to support them in its public-facing material in order to sell itself as a Canadian state agent while disrupting them by virtue of simply being an airline.

This paradox could not be maintained into the jet age, and so TCA changing its name to Air Canada is one way that this story might end. After all, this project has been about the limits of a specific sort of modern envirotechnicality based on constructions of space and time, and a new name for the airline suggests that those limits had been reached. Trans-Canada Air Lines as a name gestured towards Canadian distances—*trans*—and even *Lines* indicated movement across space. TCA had worked tirelessly through the 1940s and 1950s to try and make it and its

services fit already-established paradigms of mobility, seasonality, and technological nationalisms with little to show for it. TCA becoming Air Canada could be interpreted as the airline finally recognizing that it had not made the modern Canadian envirotechnical nation work on its behalf. The other way this story might end is to place Air Canada's public-facing discourse inside the larger trend of re-evaluating national symbols as Canadians prepared to celebrate the 100th anniversary of Confederation in 1967.

Historians have fixated on the centennial in their studies of modern Canadian nationalism, especially in light of Canada's sesquicentennial in 2017.[833] Paul Litt has recently argued, for example, that state-sanctioned centennial celebrations fixated on a "national myth-symbol complex" of shared geography and shared heritage.[834] The Canadian relationship to technology in particular was a concern for critics during the centennial years, especially as television and mass culture "bestrode the Canadian scene," as historian Leonard Kuffert has argued.[835] The threat of American popular culture creeping north of the border was especially nerve-wracking for the Canadian intelligentsia, who sought a solid set of uniquely Canadian national symbols and place-images to which modern Canadian nationalism could be tethered. Aviation was not one of them. Despite its discursive and physical nation-building role in the latter half of Canada's first 100 years, it was neither a good representative symbol of past Canada nor a rallying point for contemporary late-modern Canada.

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[833] See, for example, the two-volume (so far) *Celebrating Canada* series of edited volumes, both edited by Raymond Blake and Matthew Hayday. Volume 2, *Commemorations, Anniversaries, and National Symbols* (Toronto: University of Toronto Press, 2018), is mostly about federal and provincial centennials.

[834] Paul Litt, *Trudeaumania* (Vancouver: UBC Press, 2016), 104. See 104-126 for his entire analysis of the Centennial and Expo.

[835] Leonard Kuffert, *A Great Duty: Canadian Responses to Modern Life and Mass Culture, 1939-1967* (Montreal and Kingston: McGill-Queen's University Press, 2003), 221. See 217-234 for his analysis of the Centennial.

The largest centennial-related project was the Expo 67 world's fair in Montreal. Of course, the 50 million visitors would not have made it to Expo without accessible jet travel, nor would Montreal have been able to accommodate all those visitors without "grooming a trio of airports"—the open-to-civilians St. Hubert military airfield, the nearby St. Jean, and Montreal International—as *Flying* magazine reported.[836] However, airplanes simply did not appear in the symbols, images, music, and other constructions developed for Expo and the centennial, despite Montreal-based Air Canada turning 30 that year. Air Canada had a pavilion at Expo, but as far as I can tell there was only a small amount of Canadian content. The pavilion was themed around the evolution of flight, with an eye-catching cantilevered helical design based on one of Leonardo da Vinci's flying machines but also resembling "today's jet engines," as an Air Canada magazine ad claimed. "As you proceed through the exhibit cells nestled beneath the blades, you move from bat wings to kites, to balloons, to gliders, to trimotor aircraft to jet plane. Slowly you conquer the skies without leaving the ground and the travel posters you see every day become the places you visit. The world is smaller to your reach, larger to your mind."[837] Air travel was imagined as responsible for shrinking the world, but its responsibility for shrinking Canada in particular was not part of this imaginary. Instead, the most popular technological expression of Canada's past at the centennial was trains. Gordon Lightfoot's "Canadian Railroad Trilogy" was commissioned by the CBC for the centennial, and the second-largest state expenditure on the centennial after Expo was something called the "Confederation Train." The purple train, which criss-crossed Canada through the centennial year, had six history-and-culture themed cars and a

[836] R. G. Halford and Richard Weeghman, "Expo 67 Montreal Canada," *Flying*, May 1967, 38.
[837] Ad. No. 7045-AS, May 1967, Air Canada Collection 005.002.022, CASM.

whistle that was programmed to play the first tones of "O Canada."[838] Over ten million Canadians—approximately half of the nation's population—saw the Confederation Train and caravan as it visited their towns and cities, from Moose Jaw to Moncton, Edmonton to Edmundston, Victoria to Vercheres.[839]

Why wasn't there a "Confederation Plane"? The simple answer would be that there were no airplanes at Confederation, and that the railways were, as I have discussed in the introduction and first chapter of this dissertation, a key aspect of nineteenth-century settler Canadian national political, social, and philosophical thought. Rail was discursively constructed, even as it was being built in the 1880s, as a unique Canadian envirotechnical paradigm, binding a scattered nation, overcoming the barriers of geography and climate, and pulling a fledgling settler country into modernity. However, if TCA's public-facing discourse was to be believed, commercial airplanes were the trains of the twentieth century, doing all of this same work *even more effectively* than rail. TCA's North Stars shrunk Canada down until it was only one day wide. They flew in all weather conditions and erased any differences between summer and winter travel. They even brought exotic places with exotic climates closer to Canada. Still, despite TCA's best advertising efforts, commercial airliners do not have the same resonance in national culture that rail (still!) does because in attempting to make airliners fit those same

[838] See Peter Aykroyd, *The Anniversary Compulsion: Canada's Centennial Celebrations* (Toronto: Dundurn, 1992), 123-126. Aviation was not even the second-most represented transportation, as the "Voyageur Canoe Pageant," in which participants canoed from Alberta to the Expo site in Montreal in order to trace fur trade routes, was also a high-expense project for the centennial. Litt, *Trudeaumania*, 111.

[839] Academic guilt forces me to say that the Confederation Train did not stop in Edmundston, New Brunswick or Vercheres, Quebec, but this makes a nice parallel with Fisher's comments on at the beginning of this project nonetheless.

envirotechnical paradigms, TCA overturned them. The "monstrous acceleration of the world," as sociologist Hartmut Rosa has called it, of technological modernity changed the real and imagined relationships between Canadians, the territory on which they lived, and the technologies they used to traverse that land.[840] The efficacy and extreme nature of aviation was met with ambivalence; it could both shrink the nation for the purposes of nation-building and also shrink it into oblivion. By the late 1960s, Air Canada's three decades of emphasizing aviation's role in national technological history, physical nation-building, and the mobility of everyday Canadians simply had not taken in ways that the airline had hoped it might. When scholars, politicians, and cultural commentators grasped for something "solid" in their late- and postmodern constructions of nationhood in the years around the centennial, they grabbed onto the railways, not the airways.

This is not a uniquely Canadian story, and not a uniquely aviation story. Technologies of modernity—planes, trains, and automobiles, telephones and televisions, news media and shopping centers—have all been assigned the ability to bring us together while driving us apart. How many of us complain that the young people in our lives use their phones at the dinner table instead of talking, when they're using them to communicate with their friends elsewhere? There is something about the way these technologies appear to unmoor space and time from the clock, calendar, and map that makes us uneasy and forces us to reckon with what those clocks, calendars, and maps meant to us in the first place: a shared sense of place and belonging. We look for what David Harvey calls "fleeting, superficial, and illusory means whereby an individualistic society of transients sets forth its nostalgia for common values," grasping for

[840] Hartmut Rosa, *Social Acceleration: A New Theory of Modernity* (New York: Columbia University Press, 2013), 35.

things that are solid when all is air.[841] In this dissertation, I have shown that airplanes and the act of air travel were at times both the something "solid"—a symbol of Canadian-ness, a concrete example of homegrown technological ability—and the method by which Canadian distances and Canadian climates, which had previously been "solid," melted away. Not surprisingly, Air Canada is now one of many Canadian airlines—it deregulated in the late 1980s— and aside from perhaps different snacks or cabin crew uniforms, flying Air Canada *feels* the same as flying any other large airline in North America. The "gaps" that John Fisher was proud to have closed by flying on a TCA North Star in 1947 have collapsed so much as to form a sort of singularity. What would the Fathers of Confederation say?

[841] Harvey, *The Condition of Postmodernity*, 288.

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