

Walking the Line – The International Origins of Civil Aviation Regulation in Canada

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Résumé de l'article

Cette note de recherche explore la manière dont des considérations internationales ont influencé la mise en forme du Règlement Aérien de 1920, première réglementation de l'aviation civile au Canada. Après la Première Guerre mondiale, les représentants Alliés ont rédigé la Convention relative au règlement de la navigation aérienne, afin que le développement du potentiel révolutionnaire du vol motorisé s'exerce dans le cadre souverain de l'Etat-nation tout en favorisant le développement de l'aviation civile internationale. Le gouvernement Borden considérait la réglementation de l'aviation comme une question intérieure plutôt qu'impériale, tout en reconnaissait que la position géographique du Canada nécessitait une coordination réglementaire avec les États-Unis. Ainsi, le gouvernement Borden a conçu une politique aéronautique d'après-guerre qui permettait une réglementation compatible avec la Convention, facilitait les vols transfrontaliers avec les États-Unis et promouvait une politique étrangère plus indépendante. La régulation canadienne de l'aviation après la Première Guerre mondiale représente un élément important du réalignement plus global du Canada, au cours du XX^{ème} siècle, sur les États-Unis au détriment de la Grande-Bretagne.

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Research Note

Walking the Line – The International Origins of Civil Aviation Regulation in Canada

Sean Seyer

Abstract: *This paper explores how international considerations shaped the Air Regulations of 1920, the first regulation of civil aviation in Canada. After the First World War Allied representatives drafted the Convention Relating to the Regulation of Aerial Navigation to both constrain the revolutionary potential of heavier-than-air flight and foster international civil aviation. The Borden government considered aviation regulation a domestic matter rather than an imperial one and recognized that Canada's geographic position necessitated regulatory coordination with the United States. In response, it crafted a postwar aeronautical policy that allowed for regulatory compatibility with the convention, facilitated cross-border flight with the United States, and promoted a more independent foreign policy. Thus Canada's postwar regulation of the airplane represents an important element in its larger twentieth-century realignment away from Great Britain and towards the United States.¹*

Résumé : *Cette note de recherche explore la manière dont des considérations internationales ont influencé la mise en forme du Règlement Aérien de 1920, première réglementation de l'aviation civile au Canada. Après la Première Guerre mondiale, les représentants Alliés ont rédigé la Convention relative au règlement de la navigation aérienne, afin que le développement du potentiel révolutionnaire du vol motorisé s'exerce dans le cadre souverain de l'Etat-nation tout en favorisant le développement de l'aviation civile internationale. Le gouvernement Borden considérait la réglementation de l'aviation comme une question intérieure plutôt qu'impériale, tout en reconnaissait que la position géographique du Canada nécessitait une coordination réglementaire avec les États-Unis. Ainsi, le gouvernement Borden a conçu une politique aéronautique d'après-guerre qui permettait une réglementation compatible avec la Convention, facilitait les vols transfrontaliers avec les États-Unis et promouvait une politique étrangère plus indépendante. La réglementation canadienne de l'aviation après la Première Guerre mondiale représente un élément important du réalignement plus global du Canada, au cours du XX^{ème} siècle, sur les États-Unis au détriment de la Grande-Bretagne.*

Keywords: Aviation, Regulation, Canada, First World War, Border Policy

BY THE TIME OF THE WRIGHT BROTHERS' FIRST FLIGHT ON December 17, 1903, human beings had been ascending in hot air balloons for over a century, but the achievement of the ancient dream of *controlled* human flight by two brothers from Dayton, Ohio, marked a radical departure from previous millennia.² As word of their accomplishments spread and others took to the sky in similar machines of wood, cloth, and wires, the airplane in flight fostered feelings of awe, reverence, and hope; an aerial technological sublime that presaged a more interconnected, and therefore peaceful, world.³ But the airplane's

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capacity to swiftly transport people and material over barriers and borders—to, in effect, completely disregard a state's territorial integrity and sovereignty—also sparked apocalyptic visions of unprecedented death and destruction through unpreventable aerial bombardment.⁴

The rapidity of aeronautical developments during the First World War greatly accentuated these security concerns. Four years of existential conflict precipitated the technical diversification of the airplane toward specific military tasks (air superiority, bombardment, ground attack, night fighting, etc.) the initial use of all-metal construction, and the development of theories on the proper use of and targets for aerial bombardment.⁵ World War I transformed the airplane into a full-fledged weapons platform, but powered and controlled flight also offered the promise of rapid travel, commerce, and communication. Much like nuclear power nearly three decades later, Allied leaders after the First World War faced the question of how to foster the economically and socially beneficial elements of a dual-use technology while simultaneously restraining its destructive aspects.⁶

This brief study looks at how the Canadian response to this dilemma supported the further development of an independent foreign-policy identity in the years immediately following the First World War, one that saw Canada's interests as more aligned with those of the United States than Great Britain. Canada's contributions to the war effort stimulated a desire for increased home rule, and at the 1917 Imperial Conference Canadian Prime Minister Sir Robert Laird Borden had called for the "full recognition of the Dominions as autonomous nations of an Imperial Commonwealth."⁷ At its core, postwar-aviation regulation revolved around the issue of sovereignty, and its enactment served to further delineate the relationship between the sole North American Dominion and the rest of the British Empire. Within the first year after the armistice Borden and several high-ranking members of his government came to view aviation regulation as a national issue and Canada's aeronautical interests as more closely aligned with those of the United States than Great Britain.⁸ Two factors converged to shape this new element of foreign policy: the airplane's complete freedom of movement in flight and Canada's geographic proximity to the United States. The airplane's ability to cross the 6,416 kilometer (3,987 mile) contiguous border between Canada and the United States at any point and any time made it impossible for either nation to completely close its air space to the other and stimulated a desire for cross-border regulatory coordination.⁹ Much like in the United States, Canada's regulatory approach to aviation arose out of the need to reconcile questions of sovereign authority with the technological reality of powered flight.¹⁰

Aerial security along the U.S.-Canadian border became a concern after Great Britain, and by extension its Empire, declared war on Germany on August 4, 1914. Over the following weeks Canadian citizens in towns and villages along Lake Erie between Detroit and Toronto reported unknown aircraft flying at night. Such reports complemented deep-seated historical fears of invasion from the south, fears further aggravated by the existence of large numbers of German immigrants in the United States and the impossibility of completely closing the border to aircraft.¹¹ In response to these security concerns, Governor General in Council Prince Arthur William Patrick Albert, Duke of Connaught and Strathearn, issued Orders and Regulations Respecting Aerial Navigation on September 17, 1914. This wartime measure established a sixteen kilometer (ten-mile) prohibited zone in the airspace around nineteen major Canadian population centers and thirty-nine wireless stations (**Figure 1**).¹²



Figure 1: As a result of Privy Council Order 2389 (17 September 1914), no-fly zones were established over the following cities (1) Sydney, Nova Scotia; (2) Charlottetown, Prince Edward Island; (3) Halifax, Nova Scotia; (4) St. John, New Brunswick; (5) Fredericton, New Brunswick; (6) St. Jean, Quebec; (7) Quebec, Quebec; (8) Valcartier, Quebec; (9) Montreal, Quebec; (10) Ottawa, Ontario; (11) Kingston, Ontario; (12) Toronto, Ontario; (13) London, Ontario; (14) Winnipeg, Manitoba; (15) Regina, Saskatchewan; (16) Edmonton, Alberta; (17) Calgary, Alberta; (18) Vancouver, British Columbia; and (19) Victoria, British Columbia. Custom map created using Microsoft Bing Maps, found at <http://www.bing.com/maps/>.

But even while at war the Canadian government sought to maintain an aeronautical relationship with its neutral southern neighbor. American pilots could still legally enter Canada if they followed strict security procedures. They had to apply for clearance beforehand and, upon entering Canadian territory, land immediately at one of eleven designated landing areas for inspection. After a twelve-hour waiting period American pilots could undertake their flight “within the time and by the route specified in the clearance” issued by the inspecting officer. American pilots had to return to a designated landing station for a post-flight inspection before returning to the United States. The carrying of explosives, firearms, photographic apparatus, carrier or homing pigeons, and mails was strictly forbidden. Failure to adhere to any of these stipulations could result in a \$5,000 fine and/or up to five years imprisonment.¹³

These wartime provisions were expressly designed to ensure Canadian security, but their passage did not create a magic barrier along the border. Reports of unknown aircraft entering Canadian airspace continued, and American aircraft were fired upon in at least one instance.¹⁴ Concerns of a surprise air attack by pro-German elements within the United States peaked on Valentine’s Day night, 1915. Authorities of Brookville, Ontario—a town roughly one hundred kilometers south of Ottawa along the St. Lawrence River—reported several aircraft heading north towards the capital. This prompted Prime Minister Borden to order Parliament to go dark and post armed sentries, a practice that continued into the next night.¹⁵ Reports of American aircraft entering Canada in violation of its wartime regulations prompted repeated letters to the U.S. State Department. By the spring of 1915 the situation became so acute that Colville Barclay of the British Embassy warned Secretary of State Robert Lansing of the “danger of regrettable incidences occurring if the practice of flying across the border continues.”¹⁶ Pleas from the State Department to border-state governors that they stress to their citizens the need to fully comply with Canada’s wartime restrictions had little effect. While no aerial attack occurred and the United States joined the Allies in April, 1917, Canada’s uphill battle to ensure U.S. pilots followed its wartime provisions accentuated the need for future aeronautical coordination.

The question of aviation regulation within the larger British Empire came to the fore as the First World War came to a close. The government of Great Britain saw aviation as a means of connecting its far-flung empire in the postwar era and sought to develop a comprehensive imperial policy. In May 1917 the British Parliament established the Civil Aerial Transport Committee—under the chairmanship of newspaper magnate and aviation advocate Lord Alfred Northcliffe—to analyze postwar commercial aviation in the domestic, imperial, and international contexts. Believing an international agreement to be “of urgent importance for the purpose of encouraging civil aerial transport,” the committee produced a draft air convention and an imperial air-navigation bill. When Canadian Minister of Justice Charles J. Doherty analyzed this draft convention in January 1919 he argued that the spirit of the 1867 Constitution Act placed aviation matters under the purview of the Canadian Parliament, and that the self-governing Dominions should choose whether to adopt any international aviation convention based on their own particular situation. In February, Canadian representatives Loring C. Christie of the Department of External Affairs and Judge Advocate General Lt. Col. Oliver M. Biggar successfully influenced the new British Committee on Aerial Transport to accept separate Dominion adherence to any future international aviation convention, an important victory in the push for greater Dominion autonomy.¹⁷

Shortly thereafter, Prime Minister Borden led Minister of Trade and Commerce Sir George Foster, Minister of Customs and Inland Revenue Arthur Sifton, Doherty, Christie, and Biggar as the Canadian delegation to the Paris Peace Conference. In mid-February the leaders of Great Britain, France, Italy, and the United States agreed to establish a special commission, known as the Inter-Allied Aeronautical Commission, to study aeronautical questions pertaining to the peace conference and “draft a Convention in regard to International Air Navigation in time of peace.”¹⁸ Borden received a copy of the Inter-Allied Aeronautical Commission’s draft convention through the British delegation, and he and his advisors quickly recognized that several of its clauses went against Canada’s best interests. First, in an effort to compel widespread adoption, Article 5 of the convention required adhering states to close their airspace to aircraft from non-adhering states except through “special and temporary authorization.” If Canada ratified the convention but the United States did not, it could be forced to close its borders to American aircraft, something already shown to be nearly impossible. Second, the shared aeronautical customs policies in Annex H of the convention required states to give up complete sovereign control over their border policy. Finally, although it did allow for separate Dominion ratification as per the earlier British draft convention, the Inter-Allied Aeronautical Commission’s convention did not provide for independent Dominion representation on its proposed permanent international aeronautical commission.¹⁹

Sifton did not mince words in his analysis of the convention. He informed Borden that “even if all the other provisions of the convention were sound instead of absurd,” Canada’s lack of voting power on the proposed international aeronautical commission alone called for its rejection. Sifton declared that “under no circumstances could I imagine that it would be of advantage to have [Canada’s] affairs in this important respect decided by an International body sitting in Europe and composed almost entirely of people representing countries with absolutely different conditions, many ignorant and practically all careless as to our particular circumstances.” The Canadian delegation agreed that its acceptance of the convention remained “wholly tentative and provisional,”

and that any future signature would not represent a commitment to ratification.²⁰

With the Air Board Act of 1919 the Borden government “assumed jurisdiction” over all aspects of aviation in Canada.²¹ In addition to the issue of safety regulation, the Air Board confronted the challenges of recruitment and aircraft maintenance and questions concerning the proper administrative structure for civil and military aviation.²² Privy Council order 1379, passed July 7, 1919, marked the only official regulations enacted as a result of the Air Board’s initial flourish of activity that summer.²³ It forbade low-level flying over urban areas, “trick...or exhibition flying” over cities or public gatherings, and the intentional or unintentional dropping of articles from aircraft. Although it provided only the bare minimum of safety requirements, it offered a stark contrast to the complete lack of federal aeronautical regulation in the United States. By the end of July, members of the Air Board agreed that aerial patrols at the American-Canadian border were unnecessary and that aerial relations between the two countries should be based upon a system of reciprocity. The Air Board recessed until November while vice-chairman Biggar hammered out a more comprehensive set of air regulations that “followed the provisions of the International Convention.”²⁴

As Biggar worked on domestic regulation the convention opened for signatures in Paris on October 13, 1919, and the British government called on Canada to sign it in the name of imperial unity. In a letter to Sifton, Biggar questioned the convention’s full applicability to Canada’s unique situation. He believed that “Canada’s immediate international interests in Air Navigation relates almost solely to the United States, and if the United States does not adhere to the Convention...Canada would herself practically be forced into refusal.”²⁵ Biggar recommended that Canada declare reservations to Article 5 and Annex H at the time of signature and coordinate aeronautical policy with the United States. Sifton forwarded Biggar’s report to Prime Minister Borden and concurred in both the necessity for reservations and the utmost importance of aeronautical policy coordination with the United States. Borden asked his personal friend and High Commissioner to the United Kingdom for Canada Sir George H. Perley, stationed in London, to withhold convention signature until the creation of such reservations.

By the end of December 1919 the Privy Council had approved the Air Board’s aviation regulations. They empowered the Air Board to issue pilot’s licenses, certificates of airworthiness, and registration numbers in accordance with the convention’s registrational provisions. To allow foreign aircraft entry into Canada, the Air Board could issue a secondary Canadian registration for the aircraft and recognize foreign-pilot licenses if three conditions were met: (1) a convention existed between Canada and the aircraft’s home country; (2) the aircraft was duly registered in its home country; and (3) any such aircraft refrained from engaging in commercial activities between two points within Canada. To ensure uniformity, the Air Regulations adopted the convention’s operational provisions, or rules of the air, almost verbatim (**Figure 2**).

Instead of adopting the convention’s customs provisions in Annex H, the Canadian Air Regulations modified the existing Customs Act. The Air Regulations of 1920 both allowed for operational and registrational compatibility with the convention and ensured Canada’s sovereign authority over border policy.²⁶

In the United States, representatives from the interested executive departments had been hard at work on the creation of their own legislation compatible with the convention. On December 26, Borden informed Perley of his decision to postpone

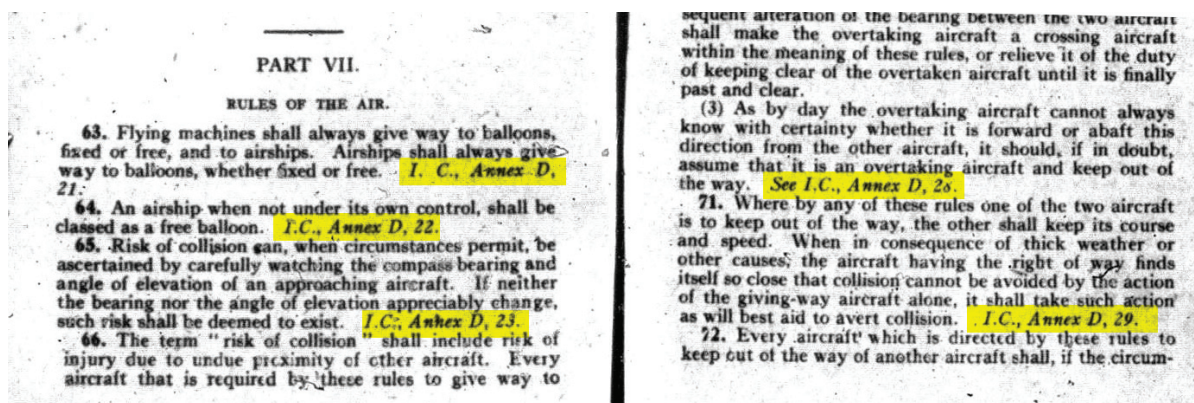


Figure 2: Two pages from the Canadian Regulations of 1920. Note how a parenthetical citation pointing to a complementary clause within the Convention Relating to the Regulation of Aerial Navigation (I.C. for International Convention) follows nearly every provision. The Air Board took great pains to ensure regulatory compatibility with the convention. *Air Regulations, 1920* (Ottawa: J. de Labroquerie Tache, 1920).

signing the convention until Canadian representatives could meet with their American counterparts to coordinate their respective reservations.²⁷ On January 20, 1920, Biggar met with Assistant State Department Solicitor W. Clayton Carpenter in Washington. Biggar presented Canada's newly-passed Air Regulations, an analysis of the ways in which they differed from the convention, and a report explaining Canada's reservations. They agreed that the two nations should coordinate their responses to the convention due to "their territorial proximity and comparative isolation from Europe." Carpenter drafted three reservations for the United States—two of which directly corresponded with those of Canada—and President Wilson approved them on April 7.²⁸ As a result of the meeting between Biggar and Carpenter, U.S. and Canadian reservations to Article Five and Annex H effectively mirrored each other (see Table 1).

Both to expedite ratification and ensure imperial uniformity, the British Air Ministry "thought no reservations should be made" to the convention, but Arthur Sifton, now Secretary of State for Canada, insisted upon their preservation. Unbeknownst to him, the Supreme Council had passed a resolution in late September that forbade the submission of reservations to avoid weakening the treaty's provisions. When Canadian High Commissioner Perley arrived in Paris to sign the convention with reservations he found that the French Foreign Office refused to accept them. Perley recommended to Acting Prime Minister George E. Foster that Canada sign the convention without reservations at that time and submit them prior to formal ratification. Foster instructed Perley to sign the convention while "at the same time notifying the Governments of Great Britain and France that if [the] United States Government does not adhere [to] the Convention in its present form [it] would not be suitable to Canadian conditions and the Canadian Government therefore could not ratify it except with such reservations."²⁹

Article Five's exclusionary clause remained the crux of the issue, and the United States and Canada were not the only nations that took issue with it. In late November 1919 the government of Switzerland had pointed out that Article Five, when combined with its geographic position, placed it in a tenuous position vis-à-vis central Europe. As a neutral power, Switzerland could not take advantage of peace treaty provisions providing Allied and Associated Powers full overflight rights over ex-enemy states. Adherence to the convention would force Switzerland to exclude German and Austrian aircraft from its airspace, and the two nations could then close their borders in retaliation. In response

TABLE 1: Comparison of Canadian and American reservations to Article 5 and Annex H of the Convention Relating to the Regulation of Aerial Navigation.

	Canadian Reservations ³⁶	U.S. Reservations ³⁷
Article 5	That notwithstanding that the United States does not become a party to the Convention, Canada may make reciprocal arrangements with the United States permitting the flight of aircraft which would under the Convention be properly registerable.	The United States reserves the right to enter into special treaties, conventions, and agreements regarding aerial navigation with the Dominion of Canada and/or any country in the Western Hemisphere if such Dominion or country be not a party to this Convention.
Annex H	That the provisions of this Annex need not be followed.	The United States reserves complete freedom of action as to customs matters and does not consider itself bound by the provisions of Annex H or any articles of the Convention affecting the enforcement of its customs laws.

to the many concerns about Article 5, the Council of Ambassadors approved a Protocol to Article Five at its 15 April meeting in Paris. It granted, “at the request of the signatory states or interested adherents, and only where...the reasons assigned are worthy of being taken into consideration, derogations to Article V of the Convention.” Such derogations would only be approved on a case-by-case basis and expire after a predetermined length of time. While the protocol did allow for flight between convention adherents and non-adherents, the requirement to petition an international body on the other side of the Atlantic for temporary permission did not fully meet the needs of Canada and the United States.³⁰

U.S. Secretary of State Bainbridge Colby instructed Ambassador Hugh Wallace to sign the convention with reservations as well but, as with Perley, the French Foreign Office refused to accept them. Shocked by this deviation from standard diplomatic practice, Colby cabled Wallace to withhold signature if he could not submit U.S. reservations at the same time. In light of the possibility that the United States might not sign the convention, the French Foreign Office agreed to allow the separate submission of U.S. reservations and Wallace signed the convention on 31 May, 1920, one day before the June 1 deadline. Finding that Wallace had submitted America’s reservations to the convention at the time of signature, Perley did likewise for Canada a week later.³¹

The signatures of the Canadian and American delegates brought the two nations one step closer to the first criteria for the entrance of foreign aircraft as stipulated in the Canadian Regulations of 1920: the existence of a convention between the two nations. But the lack of domestic regulation in the United States meant that American aircraft could not obtain registration in their home country and therefore could not obtain a secondary Canadian registration, the second prerequisite to legally enter Canada. Acting on the belief that the United States would speedily enact domestic regulatory legislation compatible with the convention and Canadian regulations, a newly-reconstituted Air Board issued a six-month courtesy to American aircraft to allow for cross-border flight in the interim.³² This courtesy exempted qualified American military

pilots from the requirement to hold foreign licenses and allowed aircraft “which would, under the Convention relating to International Air Navigation, be registerable in the United States” to legally enter Canada provided that the pilot furnished full details of the aircraft, utilized aircraft markings in accordance with the convention’s registration scheme, received a temporary airworthiness certificate from the Air Board, and paid all applicable fees.³³

Canada ratified the convention in 1922 after Great Britain agreed to accept its reservations, but the convention’s connection to the League of Nations precluded U.S. ratification.³⁴ In response, the Meighen and King governments continually renewed Canada’s “temporary” courtesy to American pilots until the U.S.-Canadian Air Navigation Arrangement of 1929. Thus to legally enter Canada during the 1920s, American pilots had to follow stipulations of a convention that the United States never ratified.³⁵

The issue of aviation regulation presented both an opportunity and a challenge for the Borden government. On the one hand, the need for regulatory uniformity to facilitate international aviation and calls for imperial unity supported convention ratification. On the other hand, the reality of Canada’s geographical situation made the United States its primary aeronautical partner and elevated North American concerns over imperial ones. To reconcile this tension, the Borden government crafted an aeronautical policy that facilitated international aviation within the context of Canada’s particular geopolitical interests.

Sean Seyer received his Ph.D. in the History of Technology from Auburn University. His book, Transcending Borders: The Origins of Federal Aviation Regulation in the United States, is under contract with Johns Hopkins University Press. He currently holds a lecturer position in the Humanities Program at The University of Kansas.

Endnotes

- 1 I wish to thank the anonymous reviewers for their insightful comments and editor-in-chief of *Scientia Canadensis* David Pantalony for shepherding this note through to publication.
- 2 For a detailed study of the dream of flight throughout human history see Bayla Singer, *Like Sex with Gods: An Unorthodox History of Flying* (College Station, TX: Texas A&M University Press, 2003).
- 3 Leo Marx and David Nye use the term technological sublime to refer to the power of man-made creations, such as the Golden Gate Bridge, to inspire awe and wonder previously reserved for the divine and certain natural phenomenon like the Grand Canyon. Aviation historian Joseph Corn extends the technological sublime to aviation in his analysis of how Americans developed near-messianic expectations of the airplane, while Robert Wohl illuminates a similar process in Europe, albeit one more tempered with the potential military ramifications of flight. See Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (New York: Oxford University Press, 1964); David Nye, *American Technological Sublime* (Cambridge, MA: The MIT Press, 1994); Joseph Corn, *The Winged Gospel: America’s Romance with Aviation* (New York: Oxford University Press, 1983); Robert Wohl, *A Passion for Wings: Aviation and the Western Imagination, 1908-1918* (New Haven, CT: Yale University Press, 1994).
- 4 Michael S. Sherry and Robert Wohl discuss in great detail the wave of apocalyptic military fiction, such as H. G. Wells’ 1908 *The War in the Air* that presented the airplane as a grave and unstoppable destructive threat. See Michael S. Sherry, *The Rise of American Air Power: The Creation of Armageddon* (New Haven, CT: Yale University Press, 1987) and Wohl (1994).
- 5 Richard P. Hallion, *Taking Flight: Inventing the Aerial Age from Antiquity through the First World War* (Oxford: Oxford University Press, 2003) 352-53.
- 6 Waqar H. Zaidi provides an excellent study of the interwar period movement to place worldwide military aviation under the authority of the League of Nations or some other international body, focusing primarily

- on the 1930s. (Waqar H. Zaidi, “‘Aviation Will Either Destroy or Save Our Civilization’: Proposals for the International Control of Aviation, 1920–45,” *The Journal of Contemporary History* 46, 1 (2011): 150-178.)
- 7 Canada at War, Speech delivered by Sir Robert Laird Borden, in the House of Commons, on the Imperial War Cabinet, 1917, the Imperial War Conference, 1917, and announcing the policy of Compulsory Military Enlistment, May 18th, 1917.
 - 8 In his study of the creation and evolution of Canada’s administrative apparatus for postwar aeronautics, William J. McAndrew claims that, “fully occupied in London and Paris, Borden left aviation policy to others.” This interpretation discounts the important connections between international events and domestic policy, something this paper seeks to rectify. (William J. McAndrew, “The Evolution of Canadian Aviation Policy Following the First World War,” *Journal of Canadian Studies, Revue d’études canadiennes* 16, 3 (1981): 87.)
 - 9 Janice Cheryl Beaver, “U.S. International Borders: Brief Facts,” Congressional Research Service, The Library of Congress, Nov. 9, 2006, <https://www.fas.org/sgp/crs/misc/RS21729.pdf>, accessed 9/14/2016.
 - 10 In the Canadian situation the question of sovereign authority centered on Canada’s place in the British Empire, whereas in the United States the issue revolved around whether the Constitution placed aviation under the purview of the several states or the federal government. For an analysis of how this tension played out in the American case—with a special emphasis on the role of Canada in that process—see Sean Seyer, *Transcending Borders: The Origins of Federal Aviation Regulation in the United States* (Baltimore, MD: Johns Hopkins University Press, forthcoming).
 - 11 In an article in *Canadian Military History*, sociologist Robert Bartholomew concludes that concerns of an air attack against Canada represented a case of collective hysteria, but they also show that the very existence of the airplane, and the inability to fully prevent aerial attack, aroused profound insecurities. (Robert Bartholomew, “Phantom German Air Raids on Canada: War Hysteria in Quebec and Ontario during the First World War,” *Canadian Military History* 7, 4 (1998): 29-36). For further discussion on the psychological aspects of aerial bombardment on civilians during WWI see Tami Davis Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945* (Princeton, NJ: Princeton University Press, 2002).
 - 12 Privy Council Order 2389, 17 September 1914, enclosed in Foster to Bryan, 21 September 1914, Records of the Department of State, RG 59 (National Archives Microfilm Publication M51, roll 1435) National Archives at College Park, College Park, MD, National Archives at College Park, College Park, MD.
 - 13 Privy Council Order 2389, 17 September 1914, enclosed in Foster to Bryan, 21 September 1914, Records of the Department of State, RG 59 (National Archives Microfilm Publication M51, roll 1435) National Archives at College Park, College Park, MD, National Archives at College Park, College Park, MD.
 - 14 “Aeroplane is Fired Upon by Canadian Troops at Montreal,” *Niagara Falls Gazette*, Sept. 17, 1914, 1.
 - 15 Bartholomew, “Phantom German Air Raids on Canada,” 33.
 - 16 American Consul Mosher to Bryan, 6 April 1915, Lansing to Lister, 6 April 1915, Barclay to Lansing, 28 July 1915, and Lansing to Governors, 5 August 1915, all in Records of the Department of State, RG 59 (National Archives Microfilm Publication M51, roll 1435) National Archives at College Park, College Park, MD, National Archives at College Park, College Park, MD.
 - 17 Interim and Final Reports of the Civil Aerial Transport Committee with Appendices (London: Air Ministry, July 1918) Doherty to Borden, 7 January 1919, Borden to Hankey, 7 January 1919, Certified Copy of a Report of the Committee of the Privy Council Approved by His Excellency the Governor General on the 30th January, 1919, Lambert to Christie, 19 March 1919, Committee on Aerial Transport, Notes on a Conference, 7 February 1919, all in Robert Borden Papers, MG 26, vol. 429, Library and Archives Canada, Ottawa, Ontario.
 - 18 “Report of the United States Delegates to the Aeronautical Commission of the Peace Conference,” in Records of the Department of State Relating to World War I and its Termination, 1914-1929, National Archives and Records Administration, Record Group 59, Microfilm Publication M367, roll 0435, 2.
 - 19 John Hilliker, *Canada’s Department of External Affairs vol. I, The Early Years, 1909-1946* (Toronto: McGill University Press, 1990) 79; Aeronautical Commission, “Notes for the Representatives of the Dominions and India with Regard to the Present Draft Convention,” undated but before May 8, 1919, Groves to Borden, 8 May 1919, “To meet the views of the Canadian Government, two alternative courses were suggested,” undated memo but before May 8, all in Robert Borden Papers, MG 26, vol. 429, Library and Archives Canada, Ottawa, Ontario.
 - 20 Sifton to Borden, 10 May 1919, Memorandum by the Canadian Plenipotentiaries Respecting the Draft Convention on International Air Navigation, 10 May 1919, both in Robert Borden Papers, MG 26, vol. 429, Library and Archives Canada, Ottawa, Ontario.

- 21 Col. Oliver M. Biggar, "The Law Relating to the Air," *Canadian Law Times* 41.11 (1921): 674.
- 22 The Privy Council appointed the following individuals to the Air Board on 23 June, 1919: Arthur L. Sifton, chairman; Oliver Biggar, vice-chairman; Canadian Minister of Militia and Defense Maj. Gen. Sydney C. Mewburn; Minister of the Naval Service Charles C. Ballantyne; Deputy Postmaster Robert M. Coulter; Assistant Deputy Minister of the Naval Service John A. Wilson; and Chief Inspector of the Department of Customs and Inland Revenue E. S. Busby. "The Canadian Air Board," *Flight*, May 27, 1920; W. A. B. Douglas, *The Creation of a National Air Force: The Official History of the Royal Canadian Air Force* vol. 2 (Toronto: University of Toronto Press, 1986) 44.
- 23 For a detailed analysis of the many challenges facing the new Air Board see McAndrew, "The Evolution of Canadian Aviation Policy," 91-93.
- 24 Minutes of the Canadian Air Board, 25, 27 June 1919, and 2, 9, 28 July 1919, all in "Air Board" series, vol. 3510, Department of National Defence Fonds, RG 24, Library and Archives Canada, Ottawa, Ontario; Orders in Council no. 1379, 7 July 1919, *The Canadian Gazette* 53 (July 19, 1919): 184; "The Canadian Air Board," *Flight* 12 (May 27, 1920): 574-75; Biggar, "The Law Relating to the Air," 674.
- 25 Douglas, *National Air Force*, 44-45; Minutes of the Canadian Air Board, 25, 27 June, and 2, 9, 28 July 1919, all in "Air Board" series, vol. 3510, Department of National Defence Fonds, RG 24, Library and Archives Canada, Ottawa, Ontario; Orders in Council no. 1379, 7 July 1919; Report from Biggar concerning the convention, 22 November 1919, enclosed in Sifton to Borden, 24 November 1919, telegram from Borden to Perley, 13 December 1919, both in Borden Papers, reel C-4317, Library and Archives Canada, Ottawa, Ontario.
- 26 Air Regulations, 1920 (Ottawa: J. de Labroquerie Tache, 1920); Minutes of the Air Board, 30 November 1919, O. M. Biggar, The Air Board: Submission, 22 December 1919, both in microfilm reel 10783, John A. Wilson Fonds, Library and Archives Canada, Ottawa, Ontario.
- 27 Memorandum, Borden to Christie, 23 December 1919; telegram, Borden to Perley, 26 December 1919; both in Borden Papers, Reel C-4317, Library and Archives Canada, Ottawa, Ontario.
- 28 Memorandum in Regard to the Proposed Convention Relating to International Air Navigation, 8-10, box 5614, Records of the State Department, RG 59, National Archives at College Park, College Park, MD; Memorandum of Conference among James Garfield of Mr. Long's Office, Mr. W. C. Carpenter, Assistant Solicitor, on Behalf of the Department of State and Colonel Bigger (sic) of the Air Board of Canada, Held at the Department of State, January 20, 1920, box 7695, Records of the State Department, RG 59, National Archives at College Park, College Park, MD. Certified Copy of a Report of the Committee of the Privy Council, Approved by His Excellency the Governor General on the 7th February, 1920, enclosed in letter from Biggar to Carpenter, 30 March 1920, box 5614, Records of the State Department, RG 59, National Archives at College Park, College Park, MD.
- 29 Sifton to Rowell, 31 March 1920, cable, Foster to Perley, 5 April 1920, both in Borden Papers, reel C-4317, Library and Archives Canada, Ottawa, Ontario. Cable, Perley to Foster, 8 April 1920; Perley to Millerand, 13 April 1920; Perley to Foster, 15 April 1920; all in G-1 vol. 1256, Records of the Department of External Affairs, RG 25, Library and Archives Canada, Ottawa, Ontario; cable, Foster to Perley, 10 April 1920, reel C-4317, Borden Papers, Library and Archives Canada, Ottawa, Ontario.
- 30 Memorandum, State Department Office of the Solicitor to the Secretary of State, 22 May 1920, box 5614, Records of the State Department, RG 59, National Archives at College Park, College Park, MD; Paraphrase of Excerpt of Cablegram from Wallace, 15 April 1920, enclosed in Adey to the NACA, 1 May 1920, folder 32-6, box 177, Records of the National Aeronautics and Space Administration, National Advisory Committee for Aeronautics, General Correspondence, 1915-1942, RG 255, National Archives at College Park, College Park, MD. "Note by the Secretary General," 14 February 1929, International Conference on Air Navigation, (Paris) 1929, Correspondence, 1929 August-1931, box 15, William MacCracken Papers, Herbert Hoover Presidential Library, West Branch, IA.
- 31 Memorandum in regard to Reservations to be Attached to Signature of Convention for the Regulation of International Air Navigation, 5 April 1920, Wallace to Colby, 12 April 1920, Colby to Wallace, 21 April 1920, telegram, Wallace to Sec. of State, 24 May 1920; telegram, Colby to Wallace, 28 May 1920; telegram, Wallace to Sec. of State, 31 May 1920; all in box 5614, Records of the State Department, RG 59, National Archives at College Park, College Park, MD.
- 32 A Privy Council order dated April 19, 1920, reconstituted the Air Board as an administrative body tasked with regulating civil aviation and overseeing the newly-constituted Canadian Air Force. This second incarnation of the Air Board included Minister of Militia and Defense Hugh Guthrie as chairman, Biggar as vice-chairman, Secretary John A. Wilson, Capt. Walter Hose (Navy) Sir Willoughby Gwatkin (Air Vice-Marshal and Inspector

- General, CAF) Edouard G. D. Deville (Department of the Interior) Lt. Col. Robert Lackie, and Lt. Col. J. Stanley Scott. Sifton to Foster, 15 April 1920, reel C-4317, Borden Papers, Library and Archives Canada, Ottawa, Ontario; Privy Council Sessional Papers No. 47, 19 April 1920, reel C-6947, Library and Archives Canada, Ottawa, Ontario; Douglas, *Creation of a National Air Force*, 46.
- 33 Minutes of the Canadian Air Board, 17 May 1920, “Air Board” series, vol. 3510, Department of National Defence Fonds, RG 24, Library and Archives Canada, Ottawa, Ontario. J. A. Wilson to the Under-Secretary of State, 18 May 1920, G-1 vol. 1256, Records of the Department of External Affairs, RG 25, Library and Archives Canada, Ottawa, Ontario.
- 34 Convention ratification also provided the legal justification for the complete Dominion control over aviation regulation that began with the passage of the Air Board Act. In 1931 the Judicial Committee of the Privy Council ruled that the Dominion’s monopoly of regulatory authority represented a “necessary and proper” power required to perform Canada’s treaty obligations as per section 132 of the British North America Act of 1867. (A similar treaty power in the U.S. Constitution could have also justified passage of American regulations in the immediately postwar years, but President Calvin Coolidge did not submit the convention to the Senate until after the passage of the 1926 Air Commerce Act. There it languished until President Franklin D. Roosevelt recalled all documents relating to it in 1933.) For further study of the issue of aerial sovereignty in Canada see Norman MacKenzie, “Legislative Control over Aviation in Canada” *Air Law Review* 3.4 (1932): 407-416; B. V. Richardson, “The Canadian Law of Civil Aviation” *Journal of Air Law* 9.2 (1938): 201-219; and Hugh W. Silverman, “Government Regulation in Canadian Civil Aviation” *Transportation Law Journal* 5.1 (1973): 89-126.
- 35 For more on the U.S.-Canadian Air Navigation Agreement of 1929 see Stephen Latchford, “Aviation Relations between the United States and Canada Prior to Negotiation of the Air Navigation Arrangement of 1929,” *Journal of Air Law* 2 (1931): 335-341.