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The British Commonwealth Air Training Plan: 1939-1945

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Abstract

In 1939, the Canadian government reached an agreement with Great Britain and other Commonwealth Dominions that created a monumental training regime within Canada's borders. The British Commonwealth Air Training Plan has been recognized by historians, politicians and economists as a tremendous contribution to the war effort, as it trained nearly 137 000 aircrew for service in the Second World War. The memory of the training plan is dwindling along with the old airfields and this paper seeks to recall the contribution by providing a descriptive overview of the British Commonwealth Air Training Plan.

The nature of armed conflict changed dramatically with the advent of aircraft in the First World War. The intricate warfare ushered in unfolded dramatically as the men, machines and accompanying knowledge available for aerial warfare had grown substantially by the outbreak of the Second World War. Between 1939 and 1945 the use of aircraft developed the modern notion
of aerial warfare utilizing first rate aircraft with skilled pilots and aircrew to engage the enemy. The skills displayed by these men were developed through demanding training regimes, synthesized across the British Commonwealth in an arrangement termed the British Commonwealth Air Training Plan (BCATP). Devised amid political tensions, the BCATP produced thousands of highly trained men and women in Canada to carry out the air war over Europe. Recognized among the greatest feats of the war, the BCATP pooled resources to plan, create and carry out the immense task of transforming raw recruits to trained aircrew in the shortest possible time. Its measure of success is reflected in the details of its existence.

Canadian involvement in air combat soared during the First World War, and served as a foundation for future involvement. More than 21 000 men had served in various capacities of the Royal Air Force (RAF) during the war, but that number dwindled in the interwar period. Throughout the 1920s, only two men received permanent commissions to the RAF per year. The fledgling Royal Canadian Air Force (RCAF) also recruited very few men, and then only those with wartime experience. The RAF launched an expansion plan in 1934 but it continued to recruit Canadians haphazardly. In 1935, the British made a direct plea to the Canadian government to increase the annual quota of Canadian applicants to the RAF to twenty-five. The expansion of the RAF led 40 Canadians to apply over the following two years, which was how long it took the Mackenzie King government to approve the quota increase as King followed his policy to “appeal to moderate opinion,” while slowly expanding his own RCAF. Immediately following this decision, the British government called for an increase to 120 applicants per year, and this was approved in March of 1938.

Throughout those four years, the two governments also negotiated training issues. The British government searched for an expanse of secure airspace in Canada or Australia to train recruits. After surfacing in 1935, the issue “lay dormant for almost another two years,” owing to Mackenzie King’s deference to a “politically divisive issue.” Ongoing diplomacy was mired in the issue of RAF control over Canadian aircrew. King’s cabinet and the Air Ministry preferred Canadian recruits be trained in Canada and operate within RCAF squadrons. This issue prevailed in the desperate discussions that preceded the creation of the BCATP as well as throughout its operation.

Early in 1939, decisions were made to award contracts to several civilian flying clubs to begin instructor preparation. While they trained over the summer, the British, Canadian, Australian and New Zealand governments sparred over the BCATP within the air ministries, the High Commissioner and Diplomatic offices, and the Prime Minister’s cabinets. They reworked document after document before coming to agreement over the final sums and percentages of the cost and commitment involved. A comprehensive agreement was reached by November of 1939, and the final agreement was signed on King’s birthday, 17 December, 1939. King “attached near-mystical properties” to his birthday, so even though conclusive agreement was reached the day before, he delayed the
signing to allow it to occur the following day. The incredible dimensions of the political scene had created years of anxiety for the British as they witnessed the rise of Nazi Germany and its immediate threat. The agreement reached in December was the initial measure in their defense strategy, set to begin early the following year.

The men and boys recruited for air training represented an assortment of backgrounds. The novelty of the Air Force, coupled with the glorious image of fighter pilots defending Great Britain, fueled the majority of the recruits signing up with the RCAF. Others joined by default after agreeing “to go into the first recruiting office they came to,” as Spencer Dunmore wrote in his chronology of the BCATP. Individual reasons aside, the recruits were quickly introduced to an unfamiliar lifestyle where the dissimilar ages, personalities and nationalities became united in the sole quest to become pilots or aircrew and defeat the Axis powers.

The recruits represented the collective association among allied nations. Members from all over the British Commonwealth trained in Canada, alongside Norwegian, Polish, Free French, Danish and pilots of other nationalities who had already faced the brunt of Nazi Germany’s Blitzkrieg. They all began their training from the ground up, with no present skills or experience to aid them. The initial recruits to the RCAF included many flying instructors from Canada and, notably, from the United States. The American pilots offered the manpower and experience desperately needed by the RCAF, but their country was still neutral. To circumvent this problem, both governments ignored the Clayton Knight Committee which recruited American pilots to be instructors in the RCAF. The Americans traveled to Canada on their own initiative, with the guarantee of a flying job and the assurance of exclusion from the oath to the King which would have annulled their citizenship. The experienced pilots formed the core of the BCATP at its inception in the roles of pilot instructors or staff pilots for the aircraft used to train the non-flying aircrew. Those with no experience joined the ranks of the other recruits in the stages of pilot training within the BCATP.

The first stage was aptly termed Manning Depot, where all Air Force recruits began their career. Surrounded by up to 2,000 other men, the recruits endured the classic military re-socialization to mould them into identical beings. Following countless orders, they drilled, exercised, studied, ate, and slept-always in unison. Alongside these parameters were the “endless series of inoculations” that completed the dreaded medical portion of Manning Depot. Manning Depot served a twofold purpose. It prepared the recruits for their military careers which would require precision in every aspect of their lives, from ironing their clothes to piloting an aircraft. Simultaneously, it provided the Air Force with men who were mature, physically fit, and disciplined. Thus, they were prepared to undergo training free from outside distractions. These requirements were essential in the training scheme that followed Manning Depot.
In every aerial operation, it is essential to address the importance of the groundcrew. They are, however, frequently forgotten or receive only slight recognition for the responsibility they held. Peter Conrad highlighted the neglected role of groundcrew, stating “The best available book on the BCATP... fails to even mention the Technical Training Station... where 45 000 groundcrew received final training.” 14 The countless tasks performed by the groundcrew in the BCATP ranged from the menial items of pulling chocks and fueling and directing aircraft, to heavy maintenance, including engine overhauls and major repairs. These tasks were daily occurrences at BCATP bases due to the frequency and intensity of flying operations, and they were carried out regardless of adverse weather and plummeting temperatures. 15 The groundcrew role was essential and remains among the most important links that drove the BCATP.

As indispensable as the ground crew was the RCAF Women's Division (WD), which was also involved in keeping the BCATP operational. Created as the Canadian Women's Auxiliary Airforce by an Order in Council on 2 July, 1941, it was renamed the RCAF Women's Division early in 1942. 16 Referred to as the WD's, the women took over many duties in the operation of the training program to allow men to train for combat roles. Ted Barris listed some of those roles as “clerks, cooks, equipment assistants, fabric workers, hospital assistants, motor transport drivers, and telephone operators.” 17

The WD's encountered the same experiences as the aircrew. They learned the basics of the RCAF at Manning Depot by drilling, undergoing medical inspections, and becoming associated with the strange and intimidating experience. Following Manning Depot, the women were assigned to their new jobs, often receiving on-the-job training instead of specialty schooling. 18 Like their male counterparts, the goal of most WD's was to learn an Air Force trade in Canada and then be posted overseas “to get as close to the war as possible,” an accomplishment many achieved. 19

The trades training the women engaged in ranged from cooking and administration, to heavy maintenance on aircraft. Over the course of the BCATP, the WD's began entering specialty schools such as the Technical Trade Training School. Mary Zieglar described the general requirements in four main trades, “aero-engine mechanic, air frame mechanic, sheet metal worker and fabric worker.” 20 Shortly after the initial recruitment of women for active service, the RCAF knew it had the makings of an excellent force of skilled workers to ensure smooth operation of the BCATP. The services provided by the Women's Division remains among the greatest contributions to aircrew training.

For the aircrew, primary training occurred at Initial Training School (ITS). ITS was a pivotal point in a recruit’s training, as the flying status of the trainee was determined at the course’s end. ITS followed a similar routine to Manning Depot with “classes, marching, cleaning and physical training,” but
supplemented flying ground school instruction. Recruits strove for their ultimate goal of becoming a pilot, which hinged on performance at ITS and a final interview. This process separated the top recruits into the pilot training category, and directed the rest to additional aircrew positions, including navigators and air gunners who attended their respective specialty schools. Ted Barris depicted the sentiments clearly by stating, "For most, no other designation but 'pilot' mattered. Four weeks at ITS would determine which it would be." Those who qualified for pilot training were elated. They would transition to the first stage of pilot training.

Immortalized for generations by the frail aircraft in use, the Elementary Flying Training School (EFTS) was the first hands-on experience a pilot trainee received with his craft. The first of the schools began operation in June of 1940, with the majority across Canada in operation by the following year. The BCATP utilized a mixed form of training in its early stages with the operation of civilian flying clubs at Air Force bases. The civilian clubs had the experience, the infrastructure and the necessary credentials to provide recruits with elementary flying training, which the Air Force lacked. Each school was supervised by a civilian under the oversight of an RCAF officer. The flying instructors were also civilians, even those who were members of the RCAF. While the aircraft were military, "in all other respects the schools were civilian operations." The result for the pilot trainees was relaxed discipline and good food, with excellent service similar to “the dining room of the Chateau Laurier,” an experience foreign to universal military structure.

The training at hand left little time to relish the food. The EFTS was in the process of producing pilots rapidly. Pilot trainees were taught the basics of flying; stick and rudder control, relying on instruments and basic aerobatics, were all supplemented with ground school classes and studying. Fred Hatch wrote that “pupils were hard pressed to master the syllabus” within the allotted seven- or eight-weeks. The first sense of accomplishment was rapidly reached, as students were expected to make their first solo flight after eight hours of flying time. This was a momentous experience for every trainee. Ted Barris stated, “the way his heart pounded, his stomach flipped, and his mind raced during that first EFTS solo experience stayed with a trainee for a lifetime.” Following the first solo, a pilot trainee faced several check flights and a final flight test in the remainder of the course, where he would undergo fifty hours of flight training and one hundred twenty-six hours of ground school.

The trademark airfields and aircraft of the BCATP commemorated in museums across the country are generally those used at the EFTS. Each airfield was created following the same blueprints. In designing the BCATP, the RCAF established a Directorate of Works and Buildings, which produced “more than 750 000 blueprints” to create the airfields. Each airfield sported the triangular runway setup to allow for change in wind direction, along with the hangers and housing barrack blocks identical to each BCATP base.
aircraft in use at the EFTS was generally the De Havilland Tiger Moth, a bright yellow biplane that was easy to fly and forgiving- perfect for a trainer aircraft. The Tiger Moth trained the majority of pilots in the BCATP, until it was replaced midway through by a modernized trainer. 32 Overall, EFTS presented the pilot trainee with a demanding but satisfying training routine in preparation for the subsequent stage of pilot training.

Service Flying Training Schools (SFTS) were an entirely different specimen. Pilots traded the benefits of diminutive aircraft and clear-cut training for powerful aircraft accompanied with a much more demanding flying syllabus with complex procedures and greater expectations. The SFTS establishments were a physical representation of this fact. They were built in the trademark BCATP manner, but were usually the sole flying occupiers of an airbase. They shared facilities with non-flying aircrew or higher skilled schools like the instructor training schools, as there could be no distractions resembling those beginner pilots would likely create. 33

Transforming basic flying skills into those required to pilot complex aircraft before the recruits traveled overseas, SFTS was the final instructional stage in a recruit's training. The ability to fly was developed until pilots could properly operate multi-engine aircraft or single-engine aircraft with a tremendous increase in power. Students flew the single-engine Harvard if they were training for fighters. If selected for bombers, they trained on the multi-engine Avro Anson or Cessna Crane. 34 These two streams also determined the type of specialty training pilots received. As the Directorate of History stated, single engine pilots learned “basic aerobatics, formation and instrument flying, and how to recover from stalls and spins.” 35 Multi-engine pilots entered what Dunmore termed the “serious side of flying,” incorporating “navigational and bombing exercises, night-flying, and formation flying.” 36

The transition to SFTS produced an important emotional alteration among the pilots. The drill square with the screaming Corporal, the medicals, the physical training, and the other mundane features of Manning Depot had faded. The recruits distanced themselves from their former lives; they hardened to the military ideal and concentrated on polishing their flying skills. The final weeks of their dreams played out at SFTS, for it was at the end of this course that they received the coveted pilot's flying badge, or wings. 37 The final wings test was a flight with the chief flying instructor who would assess students on every aspect of their training, often in a series of flights. 38 Successful students went on to experience their wings parade in front of family and friends. The completion of SFTS was a turning point in the RCAF pilot's career.

Upon completion of SFTS, the pilot was prepared for operations overseas. The Operational Training Unit (OTU) was the last stage in the BCATP. It transitioned pilots to aircraft they would encounter in operational flying. The OTU was not centered in Canada, and many recruits traveled to Britain for intensive Operational training. 39 The majority of OTU's in Canada
were single-engine fighter training bases. They incorporated the Harvard in an advanced role, before converting the pilots to the revered Hawker Hurricane, the mainstay of the Battle of Britain. The pilots at OTU in Britain moved out of the scope of the BCATP and into the operations aspect of the war, where they had envisioned themselves all along.

But OTU was not the only advanced flying a pilot graduating from SFTS could confront. Many pilots, especially in the initial period, were sent back into the BCATP to undergo the Instructor School where pilots were trained to be RCAF instructors. The sentiments of many pilots had revolved around operations since the concept of military service had first entered their minds. The majority of those recruited as Instructors felt a sense of denial at the apparent misuse of their expertise. But the BCATP was in desperate need of instructors to increase the flow of pilots overseas. Dunmore notes that “aptitude for the job... [and] individual preferences” meant nothing as instructors were needed “as rapidly as possible for the embryonic BCATP.”

The stages of training within the BCATP began with the inclusive sections of training such as Manning Depot and ITS. Those selected as pilot trainees participated in the flying training conducted at the EFTS and SFTS. The future of their Air Force careers lay in overseas service, home defense, or instruction, both in the capacity of flying training and as staff pilots for the other aircrew trades. Remarkable advancements in aircraft technology gave the RCAF an edge in warfare, but the technological increase corresponded with a new manpower requirement. Advanced bombers in use overseas were manned by four, five, and up to seven men. Originally, the bomber crews consisted of two pilots and an observer who was trained in bomb-aiming and wireless signals, all protected by one or more gunners. Over the course of the war, the introduction of modern heavy bombers changed the requirements for aircrew positions. Bombers were now flown by a single pilot who worked with a navigator, a flight engineer, a bomb-aimer and gunners, one who would double as the wireless operator.

The navigators of the heavy bombers had an important role. For the entire bombing sortie, they were required to know where the aircraft was at all times, even in adverse weather. They were to track the aircraft's progress and report heading and distance changes to the pilot at regular intervals or when required by the pilot. These tasks required a great deal of concentration and quick figuring skills. These intensive operational skills began with basic yet difficult exercises in the cramped spaces of the multi-engine Avro Ansons. These aircraft were often flown by staff pilots who carried up to four navigation pupils. Fred Hatch is accurate when he attests that the staff pilots “deserve more than passing mention.” Responsible for their pupils, “they had to have a sound knowledge of navigation, or else a strong homing instinct...their orders were to fly the course given to them by the trainees even though [it] might be obviously in error,” and then return the aircraft to base.
The aircrew shared facilities at Air Observer Schools (AOS) for some time, until the Central Navigation School housed the navigators. All aircrew learned Morse code at AOS, and bomb-aimers increased their navigation skills. This would allow them to provide the navigator with important checkpoint sightings and observations, a role they would assume on operations. From AOS, the aircrew were streamed into their respective specialty schools which included Bombing and Gunnery School for bomb-aimers and gunners, and navigation schools for navigators. 46

The aircraft used at Bombing and Gunnery schools were the Fairey Battle and the Westland Lysander. The Fairey Battle was the outdated light-bomber the RAF attempted to use in the Battle of France. 47 Transferred to Canada, they served as training aircraft for bomb-aimers and air gunners. The air gunners fired at target drogues towed by other Battles or Lysanders. Students dipped their bullet belts in colored wax and observed their accuracy by matching the colors on the white target drogues. 48 Following their training in the BCATP, the other aircrew traveled overseas to Britain, where they were crewed up in the heavy bombers to begin operations.

Reflecting on the role the BCATP played in the Second World War leads to staggering figures. Terminated on 31 March, 1945, the BCATP had trained 131,553 members of the aircrew trades. Obtained from Hugh Halliday's compilation of RCAF records, these figures display only aircrew. The number of groundcrew and members of the Women's Division also represented an incredible feat in Canadian history. 49 Additionally, the BCATP provided jobs for thousands of unemployed across the country in towns and cities picking up after the ruins of the Great Depression. The economic value of the BCATP was immense and was an indicator of what Canada could achieve.

In spite of overwhelming odds and political shifts, the BCATP proved to be one of the defining moments in Canadian history. The legacy of Canadian action in the First World War influenced Canadians in the second. The political and military leaders of the Allied states strove for the opportunity to create a training program to supply fighting forces to counter the Axis powers. They found it in Canada. From the feeble yet noble aircraft of the First World War, to the complex fighter and bomber aircraft of the Second, aerial warfare redefined the requirements of the traditional military structure. The requirements for skilled aircrew created by the new form of warfare were sufficiently provided through the BCATP. Its existence affected the young lives of thousands of men and women, providing the staggering resources necessary to quell German military forces, while elevating Canada to prominence on the world stage.

About the Author

Bruce Aleman is a second year student at the University of Lethbridge, completing a Bachelor of Arts/Education as a History major. He brings his military and aviation enthusiasm to his studies with the History Department and
is currently enrolled in an independent study looking specifically at the British Commonwealth Air Training Plan, through which he produced this paper.

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Endnotes


4. Hatch, 4-5. At this point RCAF and RAF recruits were trained at the same facilities in Britain, which explains the presence of King's government in training quota for the RAF.

5. Ibid., 7.


14. Peter Conrad, Training For Victory, (Saskatoon: Western Producer Prairie


15. Ibid., 43.


19. Zieglar, 133.

20. Ibid, 55.


24. Halliday, 54.


26. Dunmore, 84.

27. Hatch, 129.


29. Hatch, 129.

30. Ibid., 34.


34. Greenhous and Halliday, 50.

35. Greenhous and Halliday, 50 A Stall is an emergency maneuver encountered as the aircraft wing no longer produces lift at adverse attitudes. A spin is an aggravated stall, characterized by a rapid auto-rotation in a vertical descent.

36. Dunmore, 130.

37. Barris, 190-191.

39. Dunmore, 327.

40. Barris, 253.

41. Dunmore, 315.

42. Ibid., 315.


47. Armitage, 81.


49. Halliday, 75.

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