February Meeting
Topic: Closing the Mid-Atlantic Gap:
A Strategic, Operational and Personal Reflection
Speakers: Dr. Richard Goette and Dr. Geoff Hayes
Reporter: Gord McNulty

Speakers: Dr. Geoff Hayes and Dr. Richard Goette
Photo Credit - Neil McGavock

CAHS Toronto Chapter President George Topple welcomed the members and guests who turned out on a frigid, snowy day. George introduced two excellent guest speakers, Dr. Richard Goette and Dr. Geoff Hayes. Richard is an air power academic and Canadian air force historian, specializing in command and control, leadership, maritime power and air defence issues. He has an MA and PhD in History from Queen's University, where he held DND Security and Defence Forum (SDF) Master's and PhD scholarships. He has worked in research and writing for DND, including the Canadian Forces Leadership Institute, the RCAF, and the Canadian Forces Aerospace Warfare Centre. In 2010-2011 he held a one-year teaching position on the residential academic staff at the Canadian Forces College (CFC) in Toronto as an assistant professor and was also a DND Security and Defence Forum Postdoctoral Fellow at the Laurier Centre for Military Strategic and Disarmament Studies in Waterloo.

Richard is a CAHS National Director and member of the CAHS Toronto and Ottawa chapters. He is also a member of the Air Force Association of Canada. He will contribute a Guest Editorial in the forthcoming 49-3 issue of the *CAHS Journal*. Richard currently teaches history and defence studies on the Distance Learning programs for the Royal Military College of Canada and CFC. He also currently teaches a course on War & Society Since 1800 for Trent University in Peterborough and Oshawa. Richard has published extensively in air force history, air power, naval history, leadership and command and control, and Canadian defence. Some of his work has also appeared in official Department of National Defence and Canadian Forces publications. A native of Hamilton, Richard currently resides in Milton, with his wife and two-year-old daughter.

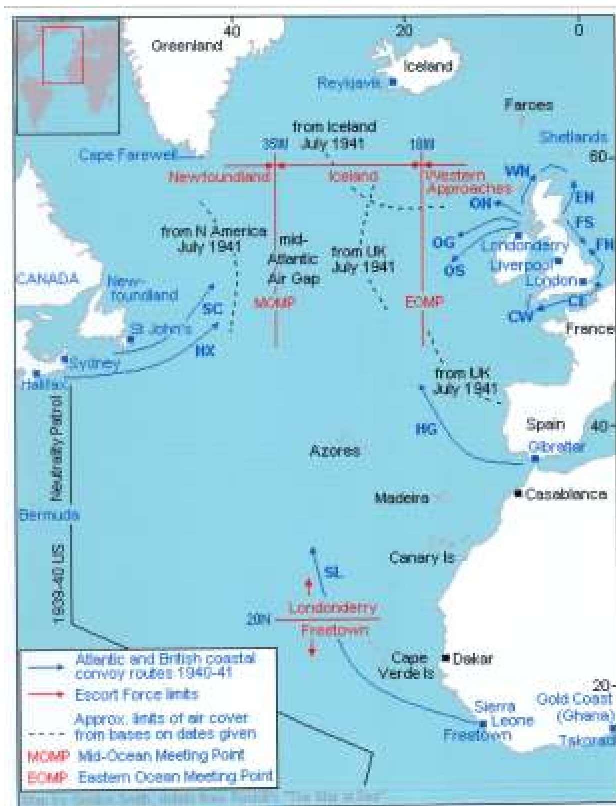
Geoffrey Hayes, a native of Waterloo, attended Lexington Public School and Lincoln Heights Public School in that city. He then went to Waterloo Collegiate and became interested in history under teachers like Jack Sinkins and Paul Voisin. He subsequently took geography and political science at Wilfrid Laurier University. Professor Doug Lorimer taught his first history course, Twentieth Century British History. Geoff's second history course was a History of French Canada with Professor Terry Copp. Geoff double majored in history and political science, but was leaning towards history.

After a trip to Europe in the summer of 1983, Geoff started his MA under Terry Copp. He interviewed a lot of veterans in the Lincoln and Welland Regiment, and wrote a 'new' wartime history of that battalion. His uncle, James F. Swayze, DSO, was an officer in the “Lincs.” Geoff travelled with his uncle around France, Belgium and the Netherlands in the fall of 1984 'researching' the book. With Terry Copp's support, that book was published in 1986 as *The Lincs: A History of the Lincoln and Welland Regiment at War*. Geoff still has a close connection to the “Lincs” and to Terry Copp, who is Director of the Laurier Centre for Military, Strategic and Disarmament Studies. Geoff won a Sir John A. Macdonald Scholarship and headed to Western, where he studied the Canadian Army Officer Corps during the Second World War. When Geoff graduated from Western, he was

already teaching at WU. After joining UW full-time, he embarked on some local history. He was commissioned by the Waterloo Historical Society to write *Waterloo County: An Illustrated History*. (1997) He also represented UW for eight years on the Board of the Waterloo Regional Heritage Foundation.

Geoff's work has taken him to many places, including Europe, Jordan and Afghanistan, studying Canadian foreign and defence policy. His interest in military leadership has led him to write papers for the Canadian Forces Leadership Institute. He has also co-edited two collections of works, one historical, one contemporary. With Mike Bechthold and Andrew Iarocci, he edited *Vimy Ridge: A Canadian Reassessment* (Waterloo: WLU Press, 2007) in time for the 90th anniversary of Vimy Ridge. With Mark Sedra, he edited *Afghanistan: Transition Under Threat* (Waterloo: WLU Press, 2008). He continues to take many battlefield study tours leading veterans, their families, students and teachers to Northwest Europe. One of those annual student tours is organized and sponsored by the Canadian Battlefields Foundation, where he is on the Board of Directors. Geoff is currently a member of the University of Waterloo Senate and the University's Board of Governors.

Richard began his presentation by underlining the key role of aircraft in the Battle of the Atlantic and the war against the U-boats. Submarine captains would dare not surface their vessels in the presence of Allied Aircraft which could alert nearby naval vessels or attack the U-boat with air-launched weapons. Maritime air power is not specifically naval, nor does it focus on the traditional air force history of fighters and bombers. As a result, Richard said, the subject has often been overlooked or even ignored by naval historians and aviation enthusiasts. The Mid-Atlantic Air Gap, also known as "the Black Pit," consisted of a giant hole in the air cover over the main trade routes between Britain and North America. It stretched 300 miles across from east to west, and 600 miles north to south from Greenland to the Azores Islands. In 1942 and 1943, Germany focussed most of its U-boat fleet against Allied convoys in this area. Free from aerial attack, U-boats were easily able to move on the surface at night and target poorly protected convoys. In fact, the U-boats were deadliest operating on the surface at night. They took a devastating toll, playing a major role in the sinking of more than six million tons of Allied shipping during 1942-43. The need to provide enough aircraft to close the air gap and ensure complete protection of the convoys became one of the greatest issues for the Allies. Although the British recognized the problem by 1941, the gap wasn't closed until the spring of 1943. The reasons are complex. Canadian naval historian Marc Milner has said the failure to close the gap earlier remains one of the great historical problems of the war.



The Mid-Atlantic Air Gap
Photo Credit - www.naval-history.net

Focussing on the British response, Richard noted RAF Coastal Command faced a shortage of long-range aircraft --- also the same aircraft

required by Bomber Command to attack Germany. The two commands were at loggerheads as to which should have priority. Bomber Command refused to allow any of its forces to be deployed in a defensive role to protect convoys. Coastal Command was supported by the Admiralty, while Bomber Command was supported by the Air Ministry and also Prime Minister Sir Winston Churchill. After Allied forces left Europe, the bombing campaign became the only means for Britain to attack Germany. Coastal Command had to play second fiddle in the competition for long-range aircraft, even as shipping losses reached disastrous levels in late 1942 and early 1943. The air officer in command of Coastal Command for most of 1941 and 1942 was Air Chief Marshal Sir Phillip Joubert de la Ferte. He was frustrated by Churchill's propensity to give greater priority to Bomber Command, which he called the prime minister's “favourite child,” and by other bombing advocates led by Air Chief Marshal Sir Arthur “Bomber” Harris, who led Bomber Command. Harris had developed an early dislike of maritime aviation in the late 1920s, when he commanded a flying boat squadron. He felt he was wasting time and that flying boats were almost useless. Harris, supported by Churchill's scientific adviser, Lord Cherwell (Professor Frederick Lindemann), opposed any diversion of aircraft from Bomber Command to Coastal Command and considered it “an obstacle to victory.” In their view, defensive operations would never win the war.

Grand Admiral Karl Donitz
Photo Credit - www.wikipedia.ca

Obtaining enough resources for Coastal Command was a frustrating endeavour. U-boats were increasingly effective during 1942. Grand Admiral Karl Donitz, head of the fleet, concentrated U-boats in the northeast and began 'wolf pack' attacks on the convoys in the air gap. There was a shortage of both quantity of aircraft, and the type of aircraft, needed. Specifically, very long range (VLR) four-engined heavy bombers were required. In June, 1941, Coastal Command took delivery of a squadron of American-built Consolidated B-24 Liberator Mark 1 bombers. Serving in 120 Squadron, RAF, Liberators were modified to extend their range to VLR standards so they could meet convoys in the middle of the air gap. Equipment that wasn't strictly necessary for anti-submarine work was replaced with additional fuel tanks. Armed with eight depth charges, Liberators could provide protection from 700 to 1,000 miles out from base, and still spend at least one-third of their flying time in the vicinity of the convoy. In September, 1941, modifications were completed and 120 Sqdn.'s nine Liberators entered service. One squadron, of course, wasn't enough to close the air gap. A tenth Liberator was added but by February, 1942, the squadron was struggling due to the lack of replacement aircraft. The Liberator was vital. All other aircraft in Coastal Command's arsenal, such as the Catalina, Sunderland, Wellington, Whitley and Hudson, lacked the patrol range to close the gap.

The U.S. Army Air Force, committed to precision bombing against Germany using the B-17 Flying Fortress and the B-24, was very adverse to the idea of the RAF using either aircraft in any role other than strategic bombing. By the late spring of 1942, Joubert was in a precarious position, blamed by

the admiralty for not asking for enough aircraft and by the air ministry for asking the impossible. Although Churchill recognized the growing U-boat threat, he still stressed the need to encroach as little as possible on the bombing campaign. Coastal Command would simply have to make do with what it had. In the summer of 1942, the efforts of 120 Sqdn. made it clear that more Liberators would have been more effective in closing the air gap. By the second week of August, the squadron's VLR aircraft had sighted seven U-boats and made three attacks, forcing them to submerge and lose contact with the convoy. During one operation, a 120 Sqdn. Liberator forced no fewer than eight U-boats to submerge, with the result that not one ship was sunk. Richard noted that since the success of wolf pack operations depended on the free movement of U-boats on the surface, the presence of aircraft proved to be a great deterrence to submarines. The U-boats, when forced to submerge, could not run on their much quicker diesel engines. Instead, they had to operate on electric engines, making them several knots slower. They couldn't keep pace with the convoy, thereby losing contact with their prey. The presence of aircraft was also a psychological boost to the sailors, who really appreciated seeing a Liberator flying over and around a convoy, and felt as if they weren't being forgotten. Aircraft were especially welcome around dusk, when the U-boats would concentrate for their night attacks.

RAF Squadron 120 Badge
Photo Credit - www.raf.mod.uk

Operations of 120 Sqdn. in the air gap led Donitz to express concern that the success of Allied operations over the convoys would extend right across the Atlantic and greatly weaken the effectiveness of the U-boat. It would be another seven months, however, before the Allies bolstered their strength. By the autumn of 1942, convoy losses began to hit home to Churchill. In October, 94 ships with 620,000 tons of cargo, were lost mostly in the air gap. Churchill formed a cabinet anti-U-boat warfare committee, chaired by the prime minister himself. It included Joubert as well as his counterparts in the admiralty and the RAF, and was a cabinet-level body with executive authority. Joubert felt that 40 VLR Liberators could close the air gap. It was a small percentage of the total number of Allied four-engined bombers available. Ironically, the U.S. lost some 40 Liberators in the first Ploesti raid on the Romanian oil fields. The most disastrous convoy battle for the Allies raged around convoy SC 107, an engagement which exemplified the need to close the air gap and the effectiveness of Allied aircraft. The convoy consisted of 44 ships sailing from New York on Oct. 24. It was besieged by a large number of U-boats once it passed out of the range of air cover from Newfoundland. For the next few days, the U-boats devastated the convoy, sinking 15 ships for a total of 88,000 tons. It was only on Nov. 5 that 120 Sqdn. was able to provide cover for the convoy, 650 miles southeast of Iceland. VLR Liberators destroyed four U-boats and attacked two of them, forcing Donitz to break off the wolf pack attacks.

The Allied success spoke for itself. Richard noted, however, it had taken three years for the British to put adequate emphasis on maritime patrol. The air ministry had failed to realize that its strategic

bombing campaign depended on security of supply. Bomber Command relied on the convoys, protected by Coastal Command VLR aircraft, to carry out its bombing offensive. Otherwise, there was a real possibility that U-boats would have sunken enough ships, especially tankers, to ground Bomber Command for lack of aviation fuel. It is sad, in Richard's view, that events in the Atlantic deteriorated to the crisis point in November, 1942, before the British finally allocated the necessary resources to protect the convoys. Delays in deliveries and modifications to the Liberators hampered the effort. In February, 1943, Air Chief Marshal Sir John "Jack" Slessor succeeded Joubert as head of Coastal Command, but at the time the RAF still had only one VLR squadron, with a daily average of about 14 aircraft available for convoy support in the air gap. This wasn't enough and shipping losses were still devastating. Stephen Roskill, Royal Navy historian, wrote that the Allies had a very narrow escape from defeat in the Atlantic in 1943. If such a defeat had happened, history would have judged that the main cause was the lack of two or more VLR squadrons for convoy escort. Fortunately, by May of 1943, U-boats were defeated in the mid-Atlantic. Air power had been key to success, and it had been achieved by 41 VLR Liberators operating in the air gap. It wasn't a large number, but it was much better than the eight or nine operational Liberators which 120 Sqdn. had been equipped with in 1942. Richard said the failure to close the air gap earlier resulted in unnecessary loss of life and prevented any possibility of expediting the Allied invasion of Europe by several months. He maintained it was a classic example of misplaced priorities and the failure of British military and political leadership to assess their economic situation during the first half of the war.

U-Boat under air attack
Photo Credit - www.historylearningsite.co.uk

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Geoff began with a personal perspective on the Battle of the Atlantic, focussing on the story of a Canadian who served in 120 Sqdn., RAF: Allan Hayes, brother of Geoff's father. Allan Edward Hayes, born in 1922, grew up in Kitchener. Geoff's uncle Allan was part of what journalist Tom Brokaw described in his 1998 book as The Greatest Generation. Geoff noted that when the war started in 1939, there had been fewer than 100 successful air crossings of the Atlantic Ocean. Allan, who had just turned 18 and finished Grade 12, signed up almost to the day to enlist in the RCAF. He went to the Manning Depot in Hamilton, then to the Eglinton Hunt Club to take some basic training. He soon became one of the tens of thousands of young pilots who were being pushed, as Geoff described it, through the British Commonwealth Air Training Plan.

Allan's first flight took place at Sky Harbour in Goderich in the fall of 1941. Flying aircraft such as the Fleet Finch, the young aviators had only eight hours of training before their first solo flight. Allan's logbook showed he first flew the Finch after 7 ½ hours of air time. He flew a Finch from Goderich to the original airstrip in Waterloo, landing in front of proud family members who watched him come in under a slight crosswind. The airstrip is now the site of Waterloo Region International Airport. Allan went to Brantford, another elementary training school, where he learned the basics of

flying the twin-engined Anson. Ironically, Geoff noted that when the war broke out, the Anson, with a range of 300 miles, was supposed to be the mainstay of Coastal Command as a land-based aircraft. Meanwhile, after conquering France in 1940, the Germans began immediately to create the U-boat pens at French ports on the Bay of Biscay. The enormous program would transform the Battle of Atlantic, beyond what anyone anticipated. Suddenly, the Allies were vulnerable with only limited-range aircraft available.

By the fall of 1941, Allan was flying Ansons with fellow classmates from Kitchener such as Don Brubaker, who enlisted in August 1940 and had done most of his flight training out west. Brubaker, like many bright and energetic young Canadians trained in the BCATP, flew in an RAF bomber squadron rather than the RCAF. He went into action during the grim days of 1940 and 1941, when the RAF was flying obsolete aircraft such as the Blenheim over the coast of occupied Europe. Brubaker was only 21 when he was shot down and killed over Belgium in October, 1941. He was buried in a small civilian cemetery in Antwerp. The loss must have been devastating for Allan, but he proceeded to get his wings at Brantford in December, 1941. By 1942, he took more advanced training on the Lockheed Hudson in Nova Scotia. He crash-landed an aircraft in May of 1942. But by August, Allan flew from Dorval to Gander, then to Prestwick, in a Hudson, with two flight sergeants. It was really remarkable that these young aviators, having just learned to fly, could take aircraft across the Atlantic and all over the world on a routine basis.

Allan joined the largely British aviators of 120 Sqdn., whose motto was endurance. Geoff maintained that the battle for resources between Bomber and Coastal commands was a complicated issue, and one that is clearer in hindsight than it was in those days. Nothing was clear in 1942. Geoff said that even in Coastal Command, there was a debate about whether to commit finite resources to simply defensive operations, to protect the convoys, or to attack the U-boat pens in the Bay of Biscay. Adjusting to the complex, powerful Liberator presented new challenges. The British concluded that the lower fuselage had to be painted white, or light blue, in order to minimize the amount of time the aircraft would be visible to U-boats. Timing was absolutely critical. It was by no means clear what weapon --- torpedoes or depth charges --- would be used to defeat the U-boats. Depth charges were chosen, but they presented issues as what size, and what kind of explosive, the timing of the fuse, and the depth at which they would explode. It was if an entirely new theatre of war was being created, with new weapons, new delivery systems, and new tactics. The scientific research was extraordinary and it continued throughout the war.

The bulk of 120 Sqdn. was stationed at Reykjavik, Iceland, as a way of getting closest to the air gap. It was a real challenge, in terms of navigation and improvisation, to find a convoy, create new systems of radio direction finding, and ensure that they were accurate as well as not being detected by the enemy. Crews, such as Allan's, were flying into the mid-Atlantic, from January to March. As Geoff said, they were "hoping against hope" that after six or seven hours they had not been diverted off course and that the navigator could keep track of location, fuel consumption, and direct a Liberator over the convoy. In early 1943, it was far from inevitable that all of the effort, planning and strategy would work as intended. One photo showed a Liberator, GFK 228, that Allan flew. He started his operational flying in January, 1943, the same time as the Casablanca Conference between Churchill and Roosevelt. It appeared as if the two leaders wanted to use VLR Liberators to greatest effect in the Atlantic. Yet, Geoff noted, it took three months to get Liberators to the theatre and get in action to protect a convoy, of say, 60 or 70 merchant ships leaving from New York or Sydney.

It would take three or four days to reach the eastern side of the air gap and another three or four days to get through the air gap. The difficult challenges were compounded by exceptionally tough weather and mid-winter gales during early 1943. No less than 120 U-boats had been concentrated by Donitz in the area immediately south of Iceland and Greenland, and well off the coasts of Northern Ireland and even Newfoundland. It wasn't until May of 1943 that Canadians crewed Liberator squadrons out of Gander, Nfld. Geoff noted there was internal dissension within Coastal Command as to where aircraft should be used, and how many aircraft should be assigned to the convoy system or to try the catch U-boats as they came in and out of the Bay of Biscay pens. Enormous losses were exemplified on the night of Feb. 7, 1943, the aircraft had to head for home. An unlucky slow convoy, SC 118, was caught by U-boat 402 that penetrated the convoy screen. Under cover of darkness, it torpedoed a British freighter, a Norwegian tanker, a Greek freighter, an American tanker, an American cargo liner and the convoy rescue ship. It was a virtual shooting gallery for three hours. A collision sent another ship to the bottom. On the morning of Feb. 8, when a 120 Sqdn. aircraft resumed contact with the convoy, it found an immense oil slick. The desperate battle reached its peak in March, 1943. Geoff showed a photo of his uncle Allan, among a crew of seven on a Liberator, when he was by that stage a second pilot. Crews consisted of airmen from Britain and various Commonwealth nations. Thirteen- or 14-hour flights were quite routine in what was a tough daily grind.

By May, 1943, the U-boats were being defeated by a combination of better weather, improved tactics, and more aircraft that were finally coming on line. The very month that Donitz had made the cover of Time magazine was also the month that he began to pull many U-boats out of the North Atlantic after unsustainable losses. Geoff's uncle Allan was in Iceland for much of 1943. He became a flight officer and took over his own aircraft through the summer and fall. The Germans decided to re-engage in the North Atlantic in the fall of 1943. They started to go into combat on the surface, mounting anti-aircraft guns on the flight deck and opening fire on Allied aircraft. In fact, Allan's squadron leader was killed by a U-boat that shot down his aircraft. The Germans also utilized acoustic torpedoes and other technological improvements. By the fall of 1943, however, the Allies again forced the U-boats to withdraw from the North Atlantic again and convoys were by then protected as far south as the Azores.

In early 1944, Allan returned from the North Atlantic after taking conversion training. He married his high school sweetheart, Jean, a great musician and lovely singer. In the summer of 1944, Allan became a flight instructor with 111 Squadron, OCTU, in the Bahamas. What a great place to end the war! The joy, however, tragically proved to be short-lived. On Feb. 23, 1945, Allan was instructing a group of young British auxiliary air force airmen. They took off from Windsor Field in Nassau, but only about 10 minutes later they collided with another aircraft that was circling the field. Allan's Liberator crashed and burned, with the loss of all eight on board. Allan was just 22 when he was killed. It was another painful reminder of the extent of Allied losses well into 1945 when the Third Reich would not quit. Jean, who remarried, now in her 90s, lives in a retirement home south of Vancouver. She made a habit of calling Geoff's father in Waterloo on Feb. 23 just about every year, maintaining a valued connection that goes back for 67 years. Allan was buried in Nassau. His grave is in a small cemetery, which includes mostly young British and some Canadian servicemen --- perhaps 50 or 60 --- who had been died in training accidents. Geoff visited the cemetery a couple of years ago.

Bob Winson presented gifts to both speakers, in appreciation of their outstanding presentations, on behalf of the Chapter members. The audience asked a variety of questions. Geoff underlined the

contrast between today`s comfortable, state-of-the-art, long range aircraft and the hardship faced by the Liberator crews. They had to endure flights as long as 16- or 17-hours through the air gap, on a quick rotation of two or three days, in a narrow, uncomfortable aircraft that was stripped down to the bare minimum. Leigh Lights, powerful spotlights that would expose U-boats, were added to the Liberator in another example of improved technology. Geoff said that the Leigh Lights seemed to be most effective when Liberators were attacking U-boats out of the Bay of Biscay. Subs could no longer surface at night in going in and out of the ports. Before Liberators arrived, Richard noted that Canada struggled to develop as much range and endurance from Catalina flying boats as possible. The risks were shown when a squadron leader died in an accident as his stripped-down Catalina tried to take off at Gander. From start to finish, the maritime air war is a fascinating topic. We might, hopefully, hear from these gentlemen again. Geoff said he would like to collaborate with Richard on a book about the Canadians who served in the battle against the U-boats.

RAF B-24 Crew examining a Leigh Light
Photo VIA - Richard Goette

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CAHS Toronto Chapter News – March 2012

Next meetings: April 14 (Chapter Elections), **May 6** (Annual Chapter Dinner)

Information please:

1) We have had the following inquiry…..Does anyone know if Amelia Earhart was ever at Wasaga Beach with her airplane? Please email neilmcgavock@rogers.com if you can help.

2) Randy Klaassen, a member of the Civil Air Search and Rescue Association (CASARA), is researching a book on CASARA's Ontario history and current operations. If you've had experience with CASARA Ontario, Randy would like to hear from you. For more information see www.casaraontario.ca/, “News”, or you can email stories or photos to casarabook@gmail.com.