

Carrying Canadian Troops The Story of RMS *Olympic* as a First World War Troopship

David R. Gray

Introduction

In the long adventurous life of Royal Mail Ship (RMS) *Olympic*, the older sister of the ill-fated RMS *Titanic*, the time she spent as a troopship ferrying Canadian troops during the First World War is a notable but frequently overlooked part of her career. *Olympic* was cheered enthusiastically by Canadian troops who sailed aboard her, respected as the "Old Reliable," praised for services rendered to other ships, and honoured for her own success in attacking an enemy submarine. Carrying more Canadian soldiers than any other troopship, *Olympic* was an important part of Canada's war effort.

Able to accommodate close to 6000 troops at a time, *Olympic* made ten round trips from Liverpool to Halifax between March and December 1916. On the return voyages she carried wounded soldiers and civilians back to Canada. For the next two years *Olympic* continued to ferry Canadian and American troops across the Atlantic, and in 1919, brought the victorious soldiers home. Although she was once a household name in Canada, *Olympic's* wartime service has since slipped into obscurity.

Most information on *Olympic* as a troopship is derived from the memoirs of the *Olympic's* wartime Captain, Sir Bertram Hayes.¹ Using Hayes's account as a framework, this article helps to further illuminate *Olympic's* wartime history with new material such as diaries, and other sources housed at the National Archives of Canada and at the hitherto largely untapped Archives of the Canadian War Museum. These



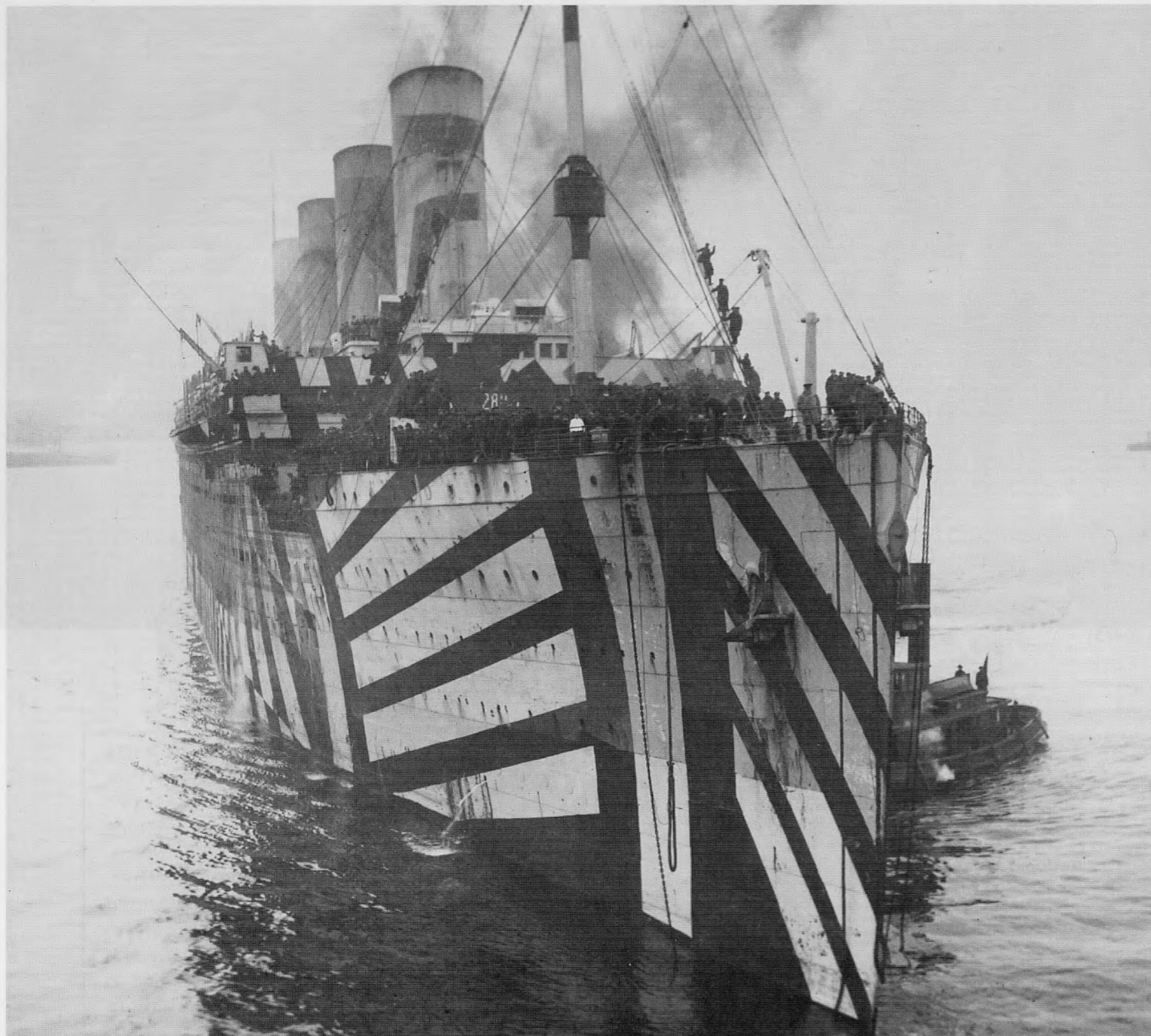
sources provide interesting details of the experiences of sailing on the vessel and of life on board, including the difficulties of embarkation and disembarkation, the danger from submarines, and the general supply and handling of this large ship in frequently hazardous circumstances.

Prewar History

The first of three similar sister-ships, that included the *Titanic* and the *Britannic*, the *Olympic* was built by Harland & Wolff in Belfast and launched as RMS *Olympic* in 1910, a year earlier than *Titanic*, with her maiden voyage taking place in 1911. As the newest and largest of the trans-Atlantic liners, *Olympic* was described with all the superlatives later applied to *Titanic*: "Ocean Greyhound," "Finest Steamer Afloat," "Largest vessel in the World," and "Queen of the Ocean." At 882 feet in overall length, with a gross registered tonnage of 45,324 tons and a total of nine decks, *Olympic* was the largest ship afloat from the time of her launch until the completion of the German liner *Imperator* two years later. After *Titanic's* tragic loss on her maiden voyage in 1912, *Olympic* returned to her birthplace and was extensively rebuilt, with new side bunkers, extended double hull, and watertight bulkheads. With enough lifeboats now fitted for for all passengers and crew, she was able to accommodate a total of 2440 passengers.²

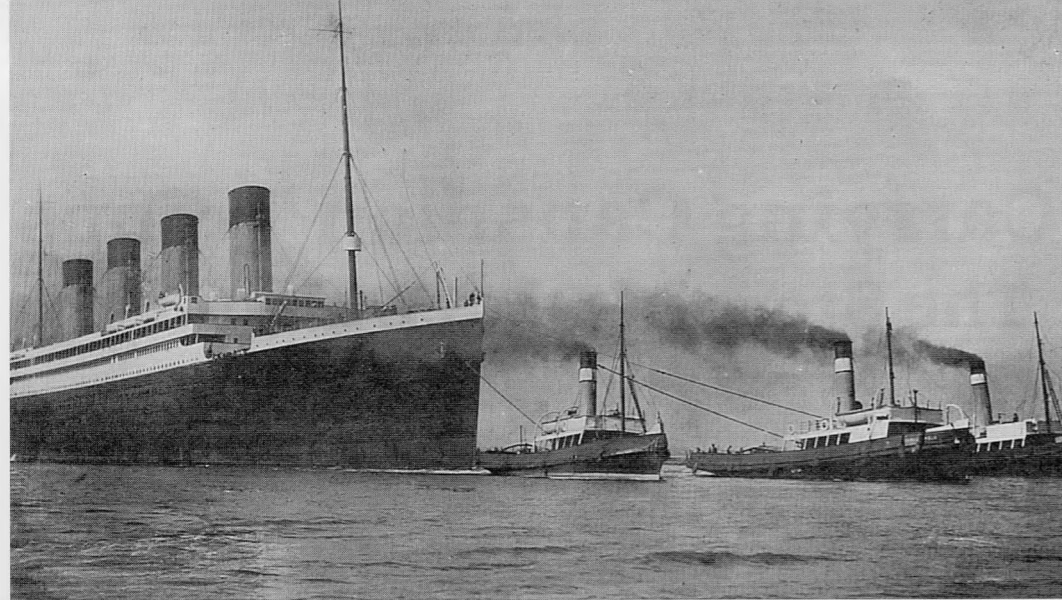
Early Wartime History

When Great Britain declared war on Germany on 4 August 1914, *Olympic* was on her usual passage from Southampton to New York. After returning from New York, on her next



Starboard bow view of *Olympic*, probably at Halifax, 1919.

NAC PA 30304



Post Card, Maritime Museum of British Columbia [MMBC] Cat. No. 3037.05

"The World's Biggest Ship." - The S.S. "Olympic" leaving Belfast for Liverpool.

voyage west she carried many Canadians and Americans returning home from Britain. On her next return voyage from New York, she helped rescue the crew of the mined British battleship HMS *Audacious* and attempted to tow the stricken vessel to port before she sank. *Olympic* made three trans-Atlantic crossings, mainly with American civilians returning home, before the British Admiralty selected her for troopship duty. In early October 1914, she returned to the Harland & Wolff shipyard in Belfast for a 10-month conversion to fit her for the new role.³

Captain Bertram Hayes, who was to command *Olympic* throughout the war, joined her at the end of the refit at Gladstone Docks, Liverpool. Bearing the number 2810, with a number of naval ratings aboard to man her two new guns (a 4.7-inch gun at the bow and a 3-inch gun at the stern), *Olympic* began her troopship career in mid September 1915. Still one of the grandest ships afloat, she was now painted grey, dark grey for the hull and a lighter grey for the superstructure. Her first task was to carry 6000 fresh troops to the eastern Mediterranean on four voyages to Spezia, Italy, and Mudros (on the Greek island of Lemnos) in support of the Gallipoli campaign.⁴

Carrying the Canadian Contingent

As the Canadian commitment to supplying troops for her European war effort grew during the course of 1915, a consistently available means of transporting them was considered essential. Hence the Canadian Government requested from the British Admiralty the use of *Olympic* as a troop transport. The Admiralty responded favourably and in February 1916 assigned *Olympic* the job

of ferrying Canadian troops across the Atlantic to Europe. As one of the largest and fastest ships afloat, she was perfect for the role. *Olympic* left Liverpool for Halifax, on the first of what would be many trips, on 22 March 1916, arriving six days later.

Preparation: Coal, Water, Provisions, and Beds

The embarkation, accommodation, and provisioning of six thousand soldiers, plus the logistics of handling tons of coal and water for each voyage, was a massive undertaking for Halifax and preparations were in full swing by February for the planned first arrival of the vessel in late March. Accommodating a ship of the size of the *Olympic* was a new and daunting challenge for port authorities.

Among the many details to be arranged, the ship's owner, the White Star-Dominion Line, requested Naval Service Headquarters to provide a harbour patrol boat or other suitable protection to avoid propellor damage, as the almost 900-foot *Olympic* would seriously overhang the 700-foot Pier 2 at Halifax.⁵

For the Atlantic crossing, *Olympic* needed at least 5100 tons of coal, as her daily consumption at her average speed was 850 tons. Depending on various factors, the amount of coal she needed to load at Halifax to fill her bunkers ranged from 3000 to 6000 tons. On 20 March 1916, a message from Halifax informed Ottawa that the Dominion Coal Company could supply the 3000 tons of coal required by *Olympic*, then en route for Halifax from Liverpool.⁶ The company could also supply the necessary lighters to carry the coal and estimated that the

process of loading it through the *Olympic's* side ports would take three days, provided no other large ships required loading at the same time. They also estimated the total amount of coal available in Halifax to meet all refueling needs to be 10,000 tons. Consequently, the collier *Brighton* was sent to Louisbourg in Cape Breton to load extra coal so that Halifax would be ready to meet all requirements.

Not all those in charge of planning for *Olympic's* arrival were optimistic, and some officials were still of the opinion that it was impossible to coal large troopships like *Olympic* in Halifax. There were, for example, only eight coal lighters available. Also, *Olympic's* water requirements were from 1500 to 2500 tons, and she used 75 tons a day while in port. There were only two old water boats available in Halifax, and even when both were in commission, they could only supply 800 tons of water daily. To meet the initial needs and avoid delays, local fire engines and all the resources of the water department were put to work to pump the required water on board.⁷ In view of the scarcity of facilities in Halifax some suggested that *Olympic* should instead be coaled in New York. Although this alternative was not resorted to, in reality, *Olympic's* first sailing from Halifax was delayed, owing to the inadequate means at the port for coaling and watering. Coaling *Olympic* actually took about six days rather than the three that the Dominion Coal Company had estimated.

During the first voyages from Halifax, the troops were embarked as early as three days before coaling was completed. In consideration of the health of the soldiers, who had to live on board during coaling with the port holes closed, E.H. Martin, the Captain Superintendent of HMC Dockyard, later requested that coaling be completed before troop embarkation began.⁸

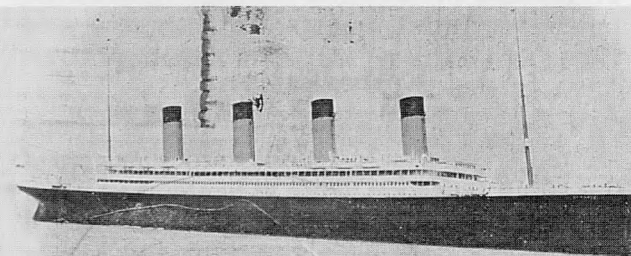
Although *Olympic* was on imperial service as a transport on Admiralty charter, the Canadian

Two additional postcards showing *Olympic*: **above**, in prewar colours and **below**, in dazzle paint at Halifax with two lighters alongside.

Department of Militia and Defence contracted with White Star Line to victual the troops in *Olympic* on the Canadian scale, at the level of 3rd Class passengers.⁹ *Olympic* sailed from Liverpool "completely victualled" and for the first trip in March 1916 required only fish, eggs, and salad from Halifax. In March 1916 her projected accommodation for 6000 troops was to be 500 in first class berths, 958 other ranks in other berths, and 4542 in hammocks. This was later amended to 500 first class, 716 NCOs in berths, 1033 men in berths, and 3765 men in hammocks on decks D, E, F, and G. Of these, 898 men were to be in hammocks in what had been the First Class Dining Saloon.¹⁰

Arrival of the Troops

Soldiers from across Canada arrived in Halifax aboard special troop trains. The trains often arrived before *Olympic* was ready for embarkation and consequently, as they waited their turn to board the vessel, the restless soldiers were marched around Halifax, given leave, and sometimes accommodated in local

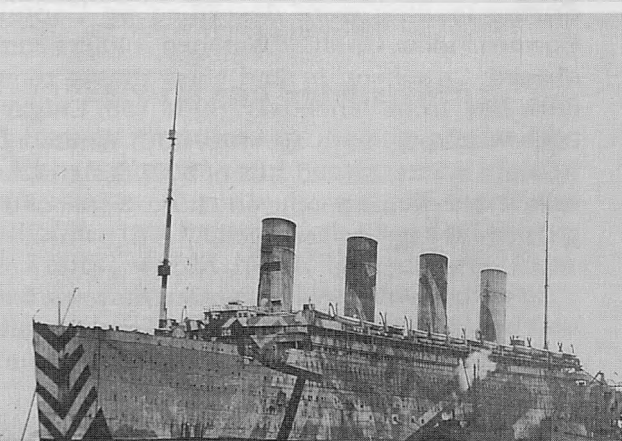


CANADIAN EXPEDITIONARY FORCE

CANADA TO ENGLAND, JUNE, 1916

For Peace, Justice and Freedom.

God Save the King.



MMBC Cat. No. 4679.P

MMBC Cat. No. 989.02

barracks.¹¹ Later, departures went more smoothly as postcards and letters home suggest. As an unidentified soldier, Harold Allen, wrote on a post card on 31 May 1916:

Have arrived here at last after some trip, this is a glorious boat the name of which you may know. We hope to sail soon along with several other Bn. This is a rotten town & it is raining like the devil. Hope photos of our departure were O.K. Cannot say many things I would like to. So long.¹²

A letter from Private John Gray of the Canadian Army Medical Corps (CAMC), tells of security arrangements in July 1916.

There were some funny orders came to us about that time. Our goods and clothing were going to be examined to see if anybody had any explosives or matches. The windows of the train had to be closed and we must not speak to anyone on the platform or wave a hand... Well we did not do much. I did not even unpack my blankets, and still have my pillow and underclothes. If(t) would have taken several days to examine everyman's things. When we reached Halifax at 6 pm (that made just a week and 3 hours on the train) we marched with all our outfit straight on to the steamer.¹³

Embarkation

The embarkation of a full load of troops required about two days. Herbert Burrell of the 100th Battalion wrote in September 1916: "We were kept on the train, in the yards for 3/4 of an hour, and then marched to the dock a short distance away & embarked. Rest of evening spent exploring the devious ways & byways of this huge steamer & slinging up our hammocks."¹⁴ Private John Gray's letter tells how meal and sleeping arrangements were communicated to the arriving troops: "As we went up the gang plank we were each given a card which told us just exactly where our bed was and where we must sit for meals and so on..."¹⁵ Other activities during loading were described by Captain Edward Fidler, CAMC: "Watched soldiers come aboard. Luncheon in 2nd class dining room. 88th Bat. from Vancouver, 89th from Calgary, 90th Winnipeg, 95th Toronto, 99th Windsor.... At night soldiers lined side of boat & signallers talked with some people on shore. Some of the girls could wig wag very well."¹⁶

For the soldiers who boarded first, the long wait before sailing was unexpected and for some the wait could drag on for several days. Sailing

number ten from Halifax in December 1916 was planned for the 13th, expected on the 14th, delayed again, and embarkation took place on the 16th. When a further delay was announced, plans were made to exercise the troops on the 17th. *Olympic* finally left Halifax five days before Christmas.¹⁷

Departure

In his novel, *Barometer Rising* (1941), Canadian author Hugh MacLennan provides a vivid description of the departure of the *Olympic* from Halifax (although the author has the liner leaving only two days before the Halifax Explosion of 6 December 1917, whereas *Olympic* actually sailed on 1 December):

Exactly at twelve the horn of the *Olympic* coughed, then plumed itself and roared, making the air shudder. Longshoremen on the tugs shouted to sailors' on the steamer's deck and there was a jangle of bells signalling the engine-room. Then two floods of dirty water raced along the ship's flanks and burst hissing against the sea-wall fronting her prow. The liner began to back slowly out. As the people watched her, someone started a cheer and a flurry shook the crowd like wind in the leaves of a tree. Then silence fell on them all and they watched dumbly as the ship drew away.¹⁸

Not all departures were routine. In fact, *Olympic's* first departure from Halifax was complicated by a minor accident. As the pilot who had guided *Olympic* out of the harbour was transferred by small boat from *Olympic* to the armed yacht HMCS *Stadacona*, the much smaller vessel had difficulty manoeuvring in the wind. As the two drifted together, *Stadacona's* masthead caught and carried away two of *Olympic's* lifeboats. Fortunately, damage to both vessels was minimal, and *Stadacona* was able to retrieve the two lifeboats.¹⁹

Before reaching the open sea and her cruising speed, *Olympic* was usually accompanied by escorts chosen from the few small ships available in Halifax. Private Gray relayed to his children his colourful impression of the escorts:

My head was buzzing and I was glad to get up into the fresh air again, and low [sic] and behold we were steaming out of Halifax harbour. It was very pretty but a little foggy. Very soon we were surrounded by other boats. One very fast torpedo boat circled round and round us all the time.

We were only going slow [sic] through the fog. It was very interesting to watch them dodging about like flies around a jam pot. They were so small compared to this one.²⁰

Accommodation and Meals

Olympic's huge size greatly impressed Private Gray:

Now perhaps I better tell... something about this boat. It is about the biggest ship the British have. Very nearly the biggest in the world. The Germans have a bigger one but it is in New York I think and has been afraid to come out ever since the war started. When this one was in the Dardenells [sic] she had 13,000 men on board. There are only about 1/2 that number now. It is difficult to get an idea how long she is. For example there is a brass plate on the top deck (which as you [know] just runs round the centre part of the ship). It says. This deck is 1150 feet round or 4 1/2 times around is one mile. There are soldiers on 7 decks and the boat deck is above that, and I don't know how many decks below that. Spencers building [a department store in Victoria, B.C.] only has 6 decks so that will give you some idea.²¹

With such a mass of humanity to accommodate, those like Captain Fidler, who were assigned to the first class berths, were lucky. "Were taken to B63", he wrote, "which proved to be the end room of a Suite with attached bath. Appointments luxurious - comfortable chairs & beds & many lights, finished in panelled oak (Louis XVI room)."²²

Private Gray was also fortunate:

...I'm pleased to say the good fortune, or special providence or whatever it is which has followed me ever since joining the army was with me still. I have a lovely little stateroom with 3 beds in it and the men with me are all right, ...and we have lots of room, a nice mahogany wardrobe to hang our clothes and drawers for small things. Electric light switch at the bed side, mattress & pillows white sheet & blanket, a fan blowing fresh air through a ventilator under my bed and so on, everything lovely.²³

After a stroll round the deck and she is a big one, I began to think of a bath, but all bathroom(s) were locked and no hot water, but where there's a will there's a way. I found a steward and a quarter (25c) did the rest. I got a cold salt water bath and got some clean clothes on and went to bed about 11 o'clock and in 5 minutes time I opened my eyes and it was 6 am next morning.²⁴

Others were not as lucky, particularly after *Olympic* underwent renovations in 1917 and the more luxurious fittings were removed or boarded over. Harry Spencer of the 1st Canadian Division Signal Company complained in May 1917: "We are a Senior Unit and supposed to be the snappiest corps in Canada but were recruited under Engineers and owing to some bungling got handed dirt all around. Got poorest quarters."²⁵

However, even before the full conversion to troopship, the below decks accommodation was less than third class. As Private Gray wrote in July 1916: "Thousands of canvas hammocks over head. Men just getting out of them and dressing on the tables. We had to stoop all the time under the hammocks. This is where the soldiers sleep, as close as they can pack up to the roof. No place to put their clothes or kits. It nearly choked me. This is where all my friends of the 103rd sleep."²⁶

Meals on board *Olympic* were of good quality, but the logistics of serving so many passengers was complicated. Gray's family received revealing details about the food:

Well what about breakfast. I looked at my card it said Compartment A2, Deck D Mess table 74. 1st sitting. It took some time to find it and oh what a place, away down in the dark. Rough benches with oil cloth tables 22 men to a table.... Well we soon lost our appetite. But McAlister [?] and I got busy and got some big tins and struggled to the kitchen and got porridge and coffee, sausages and bread for the table and got something to eat. We washed up the dishes ready for the 2nd sitting although we knew that several of our men had not found the place yet. They lost their turn and went without or bought a breakfast at the canteen.²⁷

Captain Fidler wrote from an officer's perspective in May 1916: "Meals very good though not many vegetables."²⁸

Escorts and Submarines

Although the Admiralty originally planned for the *Olympic* to sail in convoy from Halifax with escorts, Captain Hayes convinced the authorities that his ship, with a regular speed of 22 knots, would be in less danger from submarine attack sailing alone rather than with a convoy at a speed of 12 knots.²⁹

Prior to her second departure from Halifax on 1 May 1916, the question was again raised by the Admiralty: "Can *Olympic* sail from Canada without escort as on previous occasion?" Although Canadian authorities remained eager to see *Olympic* escorted, the Admiralty only provided an escort on a few occasions. For example, the departure from Halifax on the eighth voyage in 1916 was delayed due to the presence of a German U-boat on this side of the Atlantic. In view of the danger, *Olympic* sailed with the armed merchant cruisers HMS *Calgarian* and HMS *Drake* on 13 October 1916.³⁰

As with other troopships, *Olympic* received special instructions to leave at dark and to follow a prescribed zig-zagging course for the first 100 miles out to avoid interception by submarines.³¹ In March 1918, Colonel Edouard Leprohon, Canadian Senior Medical Officer (SMO) on board, wrote of his first day at sea: "Heavy sea running - following a zig zag course. ... Still in danger zone, followed by torpedo [boat] destroyers who fired two shots at a German submarine supposed to have been seen. Tremendous excitement."³²

Olympic sailed without lights showing and at night smoking was forbidden. The standard safety precautions taken were described by Herbert Burrell in September 1916: "In the evening it rained and there was considerable fog. Consequently speed was much reduced and fog horns sounded every minute. All smoking on open decks forbidden at night. Life belts worn all day & placed ready for immediate use at night."³³

Harry Spencer recorded in his diary in May 1917 that the danger of fire was ever present: "Very foggy so whistle blew every few minutes. Fire drill several times a day - Signalled by several short blasts on whistle and bugles blown all over."³⁴ The strict enforcement of the no lights regulation could have dramatic results, as rather vividly recorded by Harry Spencer: "Last night we were not allowed on deck after eight. One man has died from diphtheria and it is rumored that the captain shot one of the guards in the stomach with his revolver for lighting a match."³⁵

Precautions against submarine attacks increased in the final leg of the crossing with a resumption of a zig-zag course. Spencer wrote

as the ship approached England: "The boat zig-zagged her course all the time, turning often at right angles and at intervals of every few minutes."³⁶ *Olympic* was always met by escorting destroyers as she neared the British Isles. Lloyd Wickwire of the 193rd Battalion remembered seeing other ships "...only when we approached England. The British Navy destroyers came out and circled round and round. They would go up and drop back, then round and round. Would circle around the ship in case any submarines approached."³⁷ Captain Fidler wrote in June 1916: "Destroyer #74 came about 12 noon & continued alongside...During evening more ships were said to have come up & in trip down past Isle of Man it was said over 100 vessels were within 20 minutes call."³⁸

The threat of submarine attack delayed some voyages and prolonged others. As described by Harry Spencer, a crossing in early May 1917 lasted nine days as *Olympic* was forced to anchor for 14 hours in Loch Swilly in Northern Ireland.

We have laid here all day and think we were chased in here by submarines. Several boats passed close by during the day, including several destroyers, a British submarine and a minelayer...escorted by four destroyers and hugging the Irish shore, during which three boats kept on outside and one on inside... Passed thro sub net reaching across the loch. Bands played concerts and church service held. We passed a great many boats including large and small tramps, minelayers etc & etc. This is the fourteenth trip with soldiers made by the *Olympic*. Reported that we went by Loch Swilly 150 miles but subs were so thick and several boats were being sunk that we turned back. Any man on board sighting a sub would receive £500.³⁹

Shortly after *Olympic* arrived in Liverpool on 19 November 1916 on the return leg of her ninth trip, her sister ship *Britannic*, launched in February 1914 and commissioned as a hospital ship in December 1915, struck a mine (on 21 November) in the Aegean Sea while approaching Mudros to pick up wounded soldiers. *Britannic* sank with a loss of about 30 lives, leaving *Olympic* as the only surviving member of the White Star Line's three *Olympic* class liners.⁴⁰

Armed and Dazzled

In January 1917, *Olympic* was taken off Transport Service and returned to Belfast for

maintenance and for the installation of six 6-inch guns as added protection. Her crew was then supplemented by 40 naval ratings to man the new guns.⁴¹ On 4 April 1917 the liner was commissioned as His Majesty's Troopship (HMT) *Olympic*, and the White Ensign replaced the Red Ensign of the Merchant Marine.⁴² Some 2000 passengers, mostly women and children, embarked at Glasgow for the first crossing to Halifax as HMT *Olympic* in early April 1917.

The new status of *Olympic* raised questions in Halifax. An officer of the Navy Yard in Halifax wrote to Ottawa: "Olympic now flying white ensign. What is her status? Should I give orders for her movements and sailing as before or should I submit to Commander-in-Chief?"⁴³ Although she flew the White Ensign of a commissioned ship, the authorities determined that *Olympic* was to continue to be treated as a civilian transport.

Olympic now had a more war-like appearance as she was painted in the dazzle-paint disruptive camouflage scheme applied to many vessels during the war. During the next two years, the dazzle paint scheme was changed at least once. Due to the lack of dated photographs, there is some confusion as to the sequence of the different dazzle-paint schemes. An important record of the colours and patterns used in the later version are the sketches and paintings of Canadian war artist Arthur Lismer,

which show the colours of the dazzling stripes and swirls to have included varying shades of blue, grey, and brown.

In mid-May 1917, as the menace from submarines mounted, the Canadian Department of Militia and Defence requested that an escort be supplied for *Olympic* on her next voyage from Halifax, especially in view of the increasing hours of daylight. The Admiralty, however, stood by its original decision that she should sail alone, responding that: "No cruiser has sufficient sea speed to convoy OLYMPIC across Atlantic without reducing latter's speed to such an extent that advantage it gives is lost. OLYMPIC has been specially armed in order that she may not require convoy and so long as Admiralty instructions given her are complied with she runs very small risk from raiders. Protection against submarines is afforded when approaching British waters."⁴⁴

The Crossing

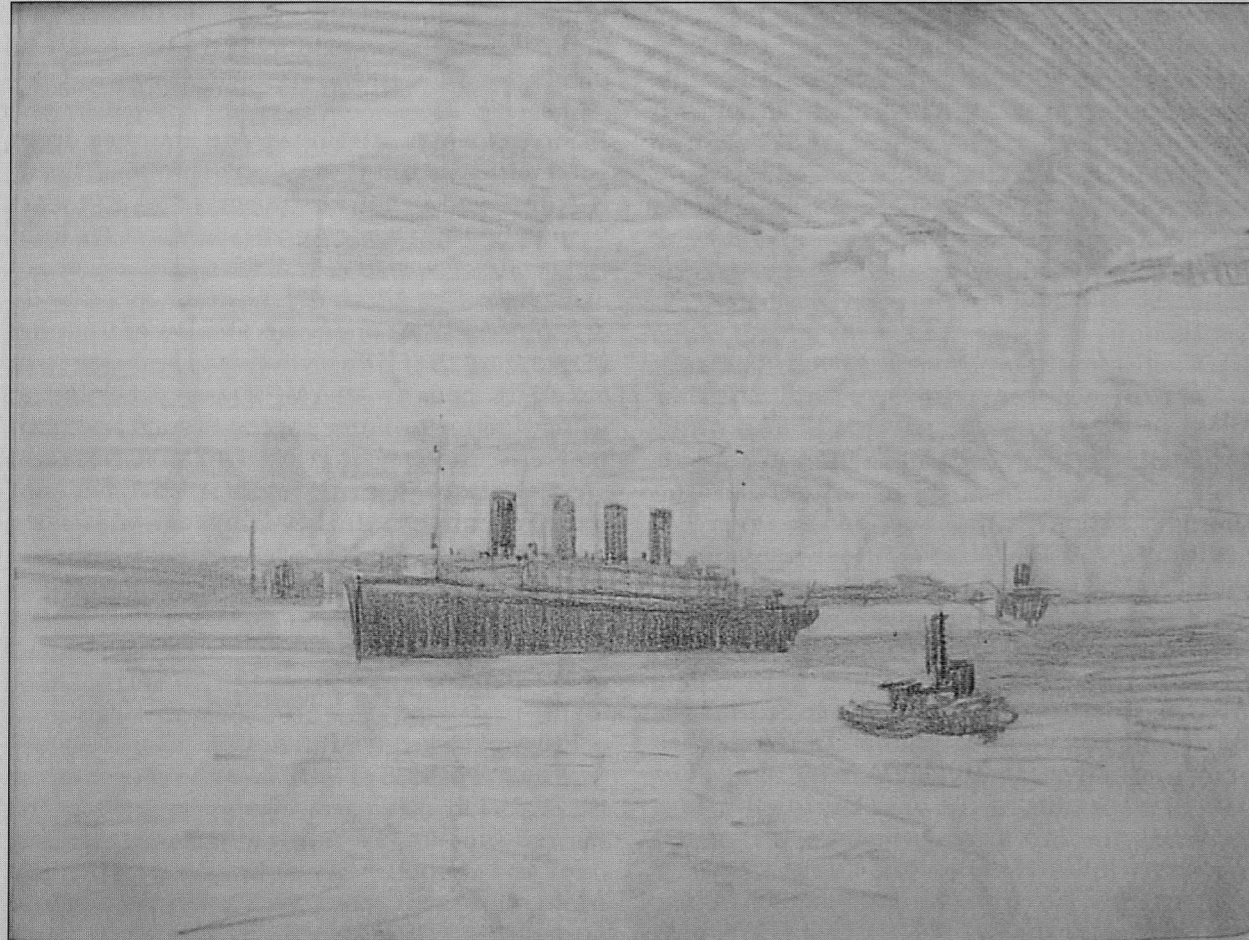
Olympic was given the name "Old Reliable" by the people of Halifax with respect to the regularity of her arrivals and departures. The normal time for the Atlantic crossing was five days and six hours depending on weather and route. However, there were irregularities and many delays caused by weather and circumstances beyond the control of the Captain and the shore-based authorities. For example, on one eastward trip to Liverpool, *Olympic*

Canadian troops returning from Europe aboard HMT *Olympic*, Halifax, NS, circa 1919. Note the dazzle-painted bridge.



NAC PA 22995

Arthur Lismer and the Olympic



1.

CWM CN 72229, Image 31



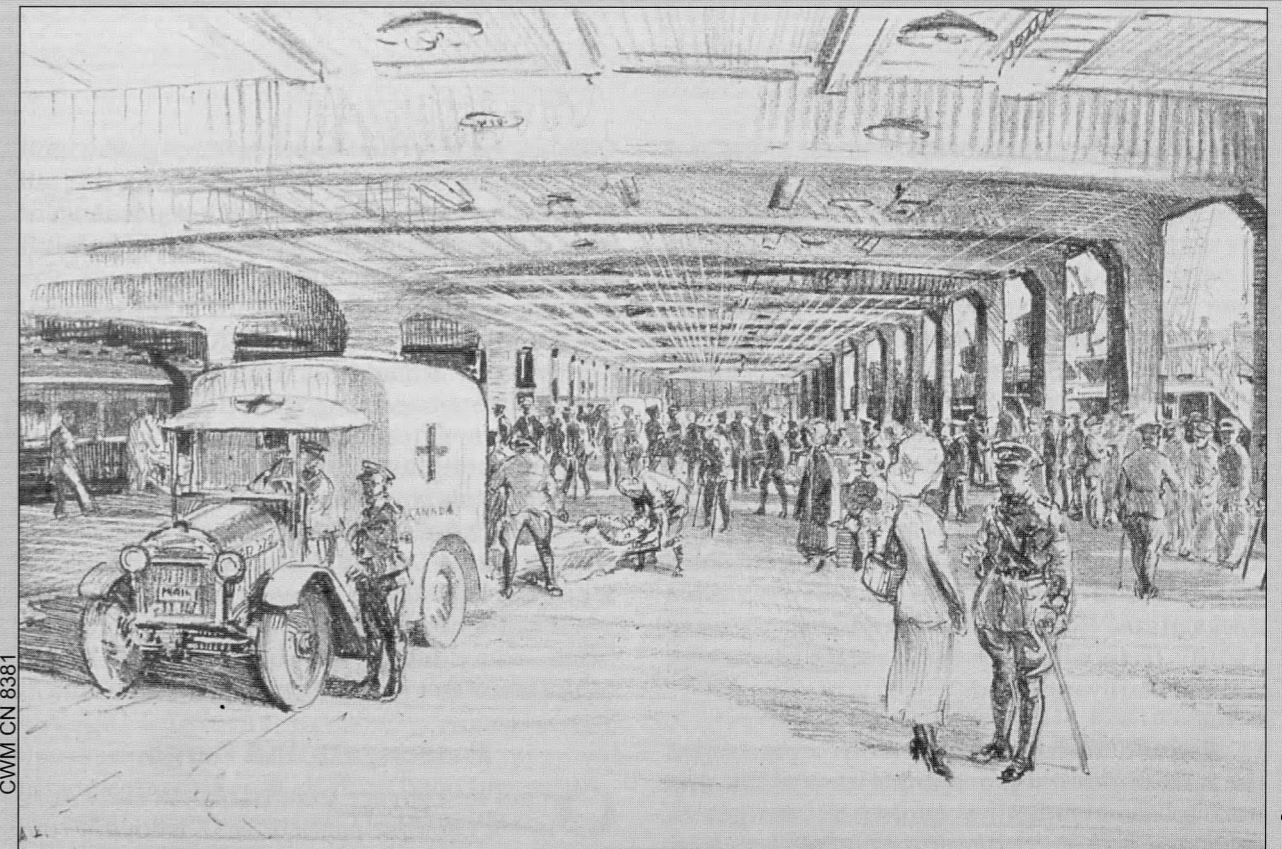
2.

CWM CN 72201



3.

CWM CN 72220



CWM CN 8381

4.

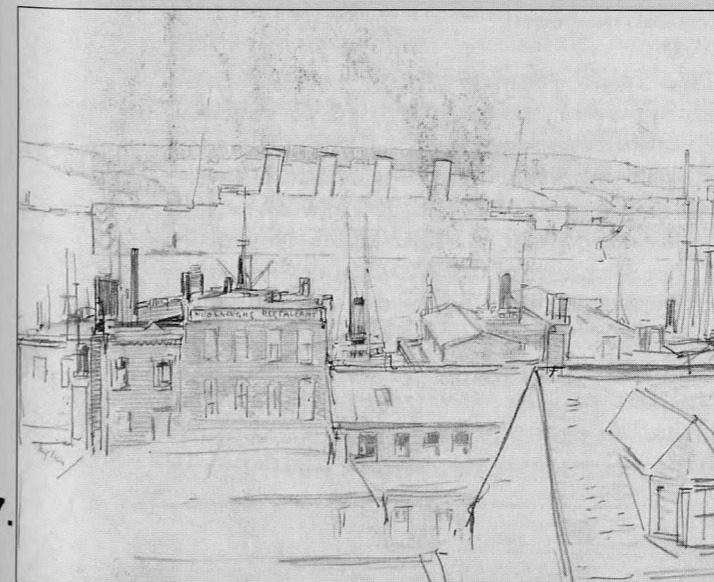
Arthur Lismer, an original member of the Group of Seven, was commissioned by the Canadian War Memorials Fund to portray naval activity in the port of Halifax in 1918. The sketches reproduced here are examples from the hundreds he completed in 1918 and 1919.

1. Olympic
2. Soldier Disembarking From Troop Ship.
3. Troops Disembarking.
4. Arrival of Hospital Ship, Pier 2, Halifax.
5. Waiting for the Olympic, Pier 2, 25 March 1919.
6. The Embarkation Pier Building.
7. Woolnough's Restaurant.



CWM CN 72229, Image 32

5.



CWM CN 72228



6.

CWM CN 72158

travelled around the northern coast of Ireland to avoid submarines in the English Channel, then south past the Isle of Man into Liverpool.

Although *Olympic's* usual route was direct from Halifax to Liverpool, some thought was given to a stop at Newfoundland to take on troops there. In May 1917 Major-General G.W. Gwatkin, Chief of the General Staff, raised the question of the practicality of the *Olympic* calling at St. John's. In the end, however, due to the *Olympic's* draught of over 35 feet, it was considered unsafe for her to enter St. John's Harbour, "as there is a very shallow patch in the middle of the entrance which for a ship of the OLYMPIC'S size necessitates two very sharp and large turns to avoid. It is a risk which...should not be unnecessarily incurred."⁴⁵

Fog and the dangers of icebergs compounded the threat from German submarines, as the ship had to slow down to avoid the danger of collisions. As recorded by Captain Fidler in June 1916: "Fog all day, said to be making only 15 knots. Stopped for awhile."⁴⁶ Herbert Burrell's diary of September 1916 paints the following picture of one foggy day: "Cold cheerless morning. Mist had cleared off but soon enshrouded us again. By 8 a.m. this morning our good ship had covered some 500 miles in spite of her reduced speed. The sombre grey clouds and sea & a cold September day, combined, do not encourage one to stay on deck. Our ship in her coating of grey paint is in harmony with the scene."⁴⁷

Storms and heavy seas made the trip across an agony for many passengers. Lloyd Wickwire of the 193rd Battalion remembered little of his time on *Olympic* during the voyage to Liverpool in the fall of 1916. He was seasick most of the way and did not eat much. He and his companions did little except walk the decks and look around the ship, no doubt keeping close to the railing.⁴⁸

A stormy crossing added a full day and a lot of discomfort to the return crossing from Liverpool to Halifax. Diary entries by the SMO, Colonel Leprohon, record a number of storms during several Atlantic crossings. "All night furious gale and boat pitching heavily", he wrote on 18 March 1918. "A great number of people sick.... Waves are mountainous high."⁴⁹ In

October, he recorded another fierce gale which had the "Big Fellow" rolling so heavily that all boat drills were cancelled and all passengers were ordered below early in the evening for what turned out to be four days in a row. "Many passengers still sick.", he wrote. "This is one of the worst trips I have made. All life belts are rigidly worn & passengers are again ordered below early this evening."⁵⁰

On a mid-May return crossing to Halifax in 1919 *Olympic* was stopped for about 12 hours due to thick fog. It was "bitterly cold on deck as well as inside", wrote John Gray in his diary. When the fog lifted in the early morning, he and the other passengers saw "two very large ice bergs away to North. Huge masses of ice hundreds of feet high shining white in the sun."⁵¹

Passengers and Cargo

On her first voyage from Halifax in early April 1916, *Olympic* carried 5737 troops. From that time on, the official number of troops to be carried per voyage was 6014. This resulted in cramped conditions below decks, but nonetheless allowed the maximum number to be carried without undue hardship.

Passengers other than soldiers listed on regular sailings included Probationary Flight Officers (Royal Naval Air Service), U.S. Navy Officers, and chemists for British munitions factories. Most of the passengers on the Halifax to Liverpool run were men, but on many voyages women, mainly nursing sisters but also wives of officers or other special cases, were also on board. In September 1916, Herbert Burrell was "Surprised to see two ladies on the quarter deck, as I had imagined we were entirely a male population on board."⁵²

Two trips from Halifax, in July and November 1917, were dedicated to carrying hired labourers from China, referred to as "coolies", who were members of the Chinese Labour Battalions and scheduled to work behind the lines on the Western Front. In mid November 1917, the Manager of the White Star-Dominion Line's Montreal office advised Commander R. L. Stephens at Naval Service Headquarters, that the CPR was carrying "6300 Coolies", to arrive in Halifax on the 19th and 21st.⁵³ The embarkation of the first complement of these Chinese labourers started at noon on 19

November and was completed by 8 pm the next day. To provide for their meals the Captain had to make a special request for 100 tons of rice.⁵⁴ On this particular trip, the passengers were accompanied by 140 guards supplied by the Canadian military. With 6152 labourers and 21 officers of the Chinese Labour Battalion on board, plus the guard, other first and second class military and civilian passengers, as well as the crew, *Olympic's* total complement on this trip was 7106, over 1000 passengers more than her official capacity.⁵⁵ Her lifeboats could only hold 6818 and there were only life belts for 7000, necessitating the acquisition of additional life rafts and life belts before sailing.⁵⁶ When *Olympic* finally left Halifax on 1 December, with her decks full of Chinese labourers, probably the largest number of passengers she carried on a single voyage, she only narrowly escaped the devastating Halifax Explosion which occurred just five days later. If she had been lost on that occasion the process of ferrying Canadian troops overseas would have been seriously hampered.

Although the transport of troops was *Olympic's* prime focus, room was sometimes made for other important cargoes. For example, on the first voyage from Halifax she carried 14 tons of ball ammunition to England. On her ninth trip to Halifax, in November 1916, she brought 20 packages of "valuable stores" from the Bank of England to be handed over to the Dominion Express Company. Representatives from the Ministry of Finance and the CPR took delivery on arrival of what was probably gold bullion. In December 1916, on the tenth trip from Halifax, a shipment of four Lewis guns and 20,000 rounds of rifle ammunition from Canada went astray on arrival.⁵⁷ In April 1917, she shipped 1000 hospital beds, mattresses, blankets and assorted materials, belonging to the Ontario Government, for delivery to the Orpington Military Hospital in England.⁵⁸ Officially a Royal Mail Ship, *Olympic* also carried mail throughout the war. For example, in June 1918 *Olympic* left Southampton for Halifax with 2704 bags of Post Office mails and 7 bags of fleet mail.⁵⁹

Activities and Entertainment

Once underway, soldiers were assigned to various work parties to keep them busy. "After bkfst they started fatigue parties going", wrote Herbert Burrell in September 1916, "& I

was amongst a bunch swabbing decks & stairs & sweeping - about an hours work in the morning and 1/2 an hour each evening."⁶⁰ The soldiers were also required to take part in "physical drill."

Some passengers on the earlier voyages in 1916 made use of those luxuries still remaining from *Olympic's* civilian vocation. Captain Fidler reported on how he "found the gymnasium & tried out the apparatus. Trotting horse with side saddle & astride vibrator, back massaging apparatus, bucking camel, rowing apparatus. Chest weight, bicycles, punching bag, ... & medicine ball... After luncheon walked around deck. Couldn't see much of sports arranged for men. Saw officers playing shuffleboard."⁶¹

Representatives of the YMCA were assigned to the trips outward bound from Halifax to organize sports and other entertainment for the troops, and to look after the books and games provided. As might be expected, the men also entertained themselves in diverse ways. Burrell, for example, recorded that he "Played piano for awhile in dining saloon of sergeants, and one of them possessing a very good baritone voice sang Wagner's 'Star of Eve' for me while I accompanied him."⁶²

Captain Fidler described a tour of the ship. "About 2 pm went below with others to see engines. Three propellor shafts, two outside on reciprocating engines & one centre steam turbine with 20 miles of blade. Steam for turbine comes from exhaust of third cylinder. Engines develop 83000 horsepower run by 29 boilers using 800 tons of coal a day & fired in shifts of 4 hrs on & 8 off."⁶³

On arrival in the United Kingdom, it was more "hurry up and wait" as the troops prepared for boarding the trains that would take them to their respective camps. Harry Spencer, for example, wrote that he "reported in full dress at nine a.m., waited in line till 11:15 a.m. when we went off ship, walked a short distance sat down and ate lunch. Got on train at 2:15 p.m."⁶⁴

Caring for the Wounded

On her return trips to Canada from England, *Olympic* brought back thousands of wounded soldiers and hundreds of civilians, including women and children who had gone to

England to be near their husbands during their training.⁶⁵ On one occasion, her passengers included Russian soldiers assigned to duty with the Canadian Siberian Expeditionary Force. Repatriated prisoners of war, soldiers on special and compassionate leave, and immigrants were also amongst her return passengers.

On each return voyage from Britain, a Senior Medical Officer was aboard, charged with caring for the medical needs of the returning soldiers and civilians. His duties began with an inspection of the passengers as they arrived at the ship. While on board, the duties included daily tours of the ship, sick parades, and treatment of any illnesses or injuries. The day before arrival in port he inspected the men for vermin and infectious, venereal, and transmittable skin diseases. The SMO was usually assisted by a medical party and several nursing sisters. *Olympic* maintained a well-equipped medical dispensary on C deck. Sick parades were held in the dispensary as it was adjacent to the roomy, sheltered deck, which had a number of benches. The main hospital on C deck aft had 60 cots with an additional 27 cots in an adjoining space. Moreover, three staterooms on C deck were available for semi-isolation of invalids. Extra isolation quarters were available in twelve staterooms on D deck aft.⁶⁶

A trip from Liverpool to Halifax on 1 October 1916, was a landmark for returning wounded Canadian soldiers. This, *Olympic's* eighth

arrival in Halifax harbour, was a difficult one for the severely wounded men. Until then, wounded soldiers were always disembarked from the ship onto lighters before *Olympic* docked at Pier 2. But on 13 October, a complaint from a Mr. McCoy, a local official concerned with looking after returned soldiers, pointing out the discomfort that this caused, came to the attention of the Military Hospitals Commission. "It is nothing but absolute cruelty to have badly wounded soldiers brought down the gangway, into the lighter", wrote MacCoy. "Up to date we have had good weather, but when the rough weather comes it is cruelty of the worst kind. We would not treat a sick cat that way..."⁶⁷ As a result, the Hospitals Commission requested that in future the wounded be taken off after docking, which was approved by Naval Service Headquarters in November.⁶⁸

On a voyage that departed Liverpool on 8 March 1918, the SMO inspected the ship, and sent ashore two cases judged to be unfit for travel (epilepsy and orchitis). He also had 15 men, who were crippled and unable to sleep in hammocks, moved to an upper deck where access to latrines and other facilities was more convenient.⁶⁹

During the great influenza pandemic in the winter of 1918-1919, the entire ship was disinfected in Southampton prior to embarkation. Passengers were examined upon boarding the ship and suspected infected cases were put ashore. *Olympic's* passengers and crew

were required to wear gauze masks at all times except during meals, with the masks being washed in a disinfectant solution daily. Those passengers who showed symptoms of flu during the voyage were confined to the ship's hospital and serious cases were handed over to the authorities on arrival in port. At the height of the flu pandemic there were as many as 12 serious cases of influenza in the hospital at once. Deaths at sea were not uncommon. By January 1919, the incidence of infection had decreased to about nine per sailing and the requirements for the use of masks was dropped.⁷⁰

Ferrying American Troops

When the USA entered the war on 6 April 1917, it had virtually no modern troop transports capable of carrying the huge numbers of soldiers that it proposed sending to the front. As a consequence, in November 1917, General Frank T. Hines, who had the responsibility of moving the American Expeditionary Force from the USA to Europe, requested that Britain's Ministry of Shipping make available to the US Army the three liners, *Aquitania*, *Mauretania* and *Olympic*.⁷¹ The British agreed and the *Olympic* began the penultimate phase of her wartime career as a carrier primarily of American troops. She arrived in New York on Christmas Day to pick up her first load of troops, departing on 12 January 1918.⁷²

Between February and June 1918, *Olympic* made five trips to Halifax and then New York from Liverpool or Southampton carrying wounded soldiers and civilians. On these trips she typically carried over 2000 military convalescents, civilians, women, and children. The return trips took more American soldiers to Britain. Most voyages stopped in Halifax first, then proceeded to New York to embark troops. Other trips proceeded directly to New York. On one occasion, on 31 January 1918, *Olympic* departed Liverpool for New York with 2300 Canadians on board (250 officers, 2000 other ranks, and 50 civilians), who then had to disembark at New York and return to Canada by train.⁷³

On her 22nd troop-carrying voyage in late April 1918, en route from Southampton to New York, a German submarine made an unsuccessful attack on *Olympic*. On her return from New York, *Olympic* turned the tables and

rammed and sank *U-103* in the English Channel. Some reports suggested that two submarines were destroyed in that interaction, but the second was not confirmed.⁷⁴ Thus *Olympic* became the only troopship during the First World War to sink an enemy submarine.

Armistice and Demobilization

Olympic was outward bound from Southampton to New York in the closing days of the war and docked in New York on 10 November 1918. On her return trip to Southampton there were few people on board and she was met by destroyers for the last time. With the end of the war and demobilization, *Olympic* was again tasked with carrying thousands of Canadian soldiers, this time all in a westward direction towards their homeland.

The first trip to Halifax from Southampton with a load of 5388 returning Canadian soldiers was a very different affair from the previous trips, when she had carried wounded soldiers and civilians. Medical staff complained that troops had no desire to follow the established regulations for avoiding the influenza.⁷⁵ When *Olympic* arrived in Halifax on 14 December 1918, she was met by cheering crowds and a flotilla of smaller boats. At this time, *Olympic* was still in her dazzle colours and Canadian war artist Arthur Lismer made several sketches of her bearing her last coat of this disruptive paint pattern. As he wrote in a letter to Eric Brown, Director of the National Gallery, on 24 December: "The 'Olympic' which has carried so many of the Canadians over, docked here last week. It was a magnificent sight - & is the most typical of all such subjects - there will be many such of course & I shall have good opportunity to study them."⁷⁶ Later, in early 1919, he used these sketches as he worked on his painting '*Olympic*' with *Returned Soldiers*, which he completed in August. Captain Hayes recorded that *Olympic* resumed her peaceful garb in February 1919 and the Red Ensign was once again hoisted in place of the White.⁷⁷

Despite her return to peace-time colours, *Olympic* nonetheless remained busy ferrying Canadian soldiers back home. The wear and tear of her troop carrying duties obviously took their toll, with Private Gray noting in his Diary after boarding her at Southampton on 10 May 1919 to return home that "The *Olympic* seems in dirty

Wounded Canadians on *Olympic* entering Halifax, October 1916



Photo by H. J. Woodside, NAC PA 16791



Above: Nurses and Officers on HMT *Olympic* 21 April 1917.

Below: Canadian troops boarding *Olympic* in Southampton in mid April 1919. *Olympic* is in her new peacetime paint colours, note nurses waving from dock.

CWM AN 19780067-056

bearing wounded soldiers and civilians before the Armistice, and seven return trips after. The total number of Canadians carried back to Canada was about 58,000, 16,000 before and 42,000 after the Armistice.

Postwar History

In August 1919, *Olympic* began a major overhaul at Harland & Wolff in Belfast. Completely reconditioned and converted to oil-burning, she resumed passenger service across the Atlantic from Southampton in July 1920. For the next 15 years she served on the Atlantic run, continuing to provide reliable and economic service. In the late 1920s further reconstruction and modernization was undertaken, and in 1933-34 her engines were overhauled. At the same time, a merger occurred between the Cunard and White Star lines, and the next year, she was withdrawn from service and finally broken up in 1937. Several complete rooms and hundreds of fittings were sold at auction and preserved, many of which can still be seen in various locations in Britain.⁷⁹ Some original wooden wall panelling from *Olympic* has been installed in "The Olympic Restaurant" on Celebrity Cruises newest ship, *Millennium*, completed in 2000.⁸⁰

The Canadian Legacy

At the end of the war, the people of Halifax showed their appreciation for *Olympic's* service through the presentation of a silver tray to her captain, inscribed to Captain Bertram Hayes, "In recognition of his services as Commander of H.M. Transport *Olympic* during the World War. December 16th, 1918."⁸¹ Although most Canadians who served in the First World War travelled on one of 24 other troop transport vessels, nonetheless *Olympic* carried overseas the equivalent of about four Canadian divisions. She became a very familiar sight in Halifax Harbour and, indeed, Arthur Lismer's well-known sketches of her in the port in 1918 have given her a kind of iconic status amongst the vessels that transported Canadians during the war. Although *Olympic* was once known by



NAC PA 6050

condition. Pipes and all plumbing seems out of order."⁷⁸ It was clearly time for "Old Reliable" to undergo a refit.

On 21 July 1919 *Olympic* arrived in Liverpool after her final few voyages as a troopship. In her three-and-one-half years of ferrying troops across the Atlantic she had carried some 72,000 Canadians to war and brought at least 58,000 back home. There were 14 voyages from Halifax, 12 of them carrying an average of 6000 Canadian troops each, for a total of 72,000 Canadian troops carried to war, in addition to 12,000 members of the Chinese Labour Battalion. In 1918, she made eight trips bearing American troops, which, with 6000 each, would have amounted to a total of 48,000. In total, then, *Olympic* carried approximately 132,000 across the ocean to the war effort. As for return trips, she made eight trips to Halifax

thousands across Canada, personal remembrances of the ship and her wartime efforts are no longer common. Doubtless some of the very diminished band of First World War veterans still alive have untapped recollections of sailing on her, but unfortunately these will almost certainly be lost. Transport across the Atlantic was an important preliminary aspect of the service of all Canadians who went overseas and it is one that has not often been discussed in print. It is hoped that the foregoing has provided some taste of what this entailed and of the important contribution made by *Olympic* and vessels like her to Canada's war effort and the wartime experience of Canadians.

Acknowledgements

The author would like to Dr. Roger Sarty of the Canadian War Museum, who encouraged the initial archival research into the story of *Olympic* as a troopship; Carol Reid, CWM, who helped with CWM archival material; and his Aunt, Olive Collington, and cousin Barbara Collington Ritter, for preserving and transcribing his Grandfather's war diaries.

Notes

1. B. Hayes, *Hull Down; or Reminiscences of Wind-jammers, Troops and Travellers*, (New York: Macmillan, 1925).
2. A. Kludas, *Great Passenger Ships of the World*, Vol. I, 1858-1912, (Cambridge: Patrick Stephens, 1975), p 179.
3. T.M. McCluskey, M. Sharpe, and L. Marriott, *Titanic & Her Sisters Olympic & Britannic*, (London: PRC Publishing, 1999), p. 202.
4. Hayes, *Hull Down*, p. 187.
5. National Archives of Canada (NAC) RG 24 Vol. 3722 1048-21-24 vol. 1, R.G. Mitchell, Assistant Manager, White Star-Dominion Line, Montreal to G.J. Desbarats, Deputy Minister, Naval Service Headquarters, Ottawa, 20 March 1916.
6. *Ibid.* Navy Yard, Halifax, to Naval Service Headquarters, Ottawa, 20 March 1916.)
7. *Ibid.* Vol. 1, E.H. Martin, Captain Superintendent, Dockyard, Halifax to Secretary, Naval Service Headquarters, Ottawa, 4 April 1916.

Top: Handing out cigarettes to troops aboard HMT *Olympic*, Halifax, NS, circa 1919.

Middle: "All aboard for Vancouver, 72nd Bn boys on the *Olympic*." (1919?)

Bottom: "Home coming of the Canadian 'Soldiers of the King' - The ocean greyhound '*Olympic*' arriving at Halifax, the 3rd most important port in the world with over 5000 troops aboard."

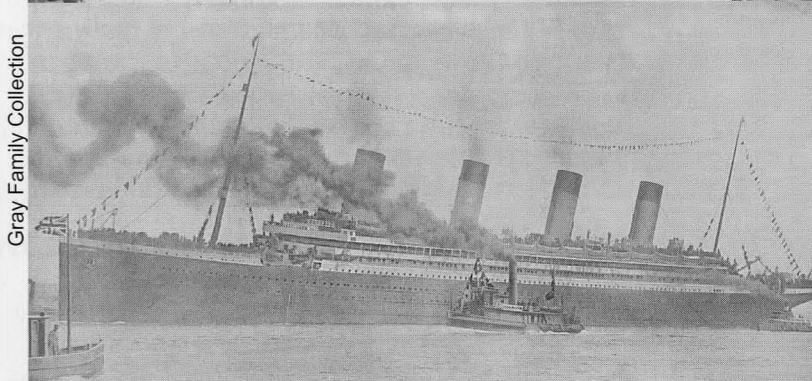
8. *Ibid.* Vol. 2, E.H. Martin, Captain Superintendent, Dockyard, Halifax to Secretary, Naval Service Headquarters, Ottawa, 7 September 1916.
9. *Ibid.* Naval Service Headquarters, Ottawa, to Admiralty, London, 13 April 1916.
10. *Ibid.* Admiralty, London, to Naval Services Headquarters, Ottawa, 20 March 1916.
11. Canadian War Museum (CWM) Archives 58A 1 90.11, Harry Storey Spencer Diary 27 April 1917.
12. Maritime Museum of British Columbia, Cat. No. 989.02. Post Card, Harold Allen to Trio Photographer, Victoria, B.C. 31 May 1916.



NAC PA 30303



NAC PA 6341



Gray Family Collection

13. Gray Family Collection, John Gray to Mrs. J Gray and family, Victoria, B.C. 25 July 1916.
14. CWM Archives, 58A 1 92.10-13, Herbert Hecford Burrell Diary, 18 September 1916.
15. Gray Family Collection, John Gray to Mrs. J. Gray and Family, Victoria, B.C. 25 July 1916.
16. CWM Archives 58A 1 8.6, Captain Edward Fidler Diary, 31 May 1916.
17. NAC RG 24 Vol. 3722. 1048-21-24 vol.4. Naval Service Headquarters, Ottawa, to Admiralty London, 21 December 1916.
18. Hugh MacLennan, *Barometer Rising*, (New York: Duell, Sloan and Pierce, 1941), p. 55.
19. NAC RG 24 Vol. 5671 NSS 80-1-3, Lt.-Commander R.A. Barber, Commanding Officer, HMCS Stadacona, to Senior Officer Patrols, Halifax, 7 April 1917.
20. Gray Family Collection, John Gray to Mrs. J. Gray and Family, Victoria, B.C. 25 July 1916.
21. *Ibid.*
22. CWM Archives, Captain Edward Fidler Diary, 31 May 1916.
23. Gray Family Collection, John Gray to Mrs. J. Gray and Family, Victoria, B.C. 25 July 1916
24. *Ibid.*
25. CWM Archives, H.S. Spencer Diary, 28 April 1917.
26. Gray Family Collection, John Gray to Mrs. J. Gray and Family. 25 July 1916.
27. *Ibid.*
28. CWM Archives, Captain Fidler Diary, 1 June 1916.
29. Hayes, *Hull Down*, p. 199.
30. NAC RG 24 Vol. 3723 1048-21-24 vol. 3. Navyard Halifax to Naval Service Headquarters, Ottawa. 13 October 1916.
31. NAC RG 24 Vol. 3722 1048-21-24 vol. 2. Deciphered message, Navy Yard, Bermuda to Naval Services Headquarters, Ottawa. 28 June 1916.
32. CWM Archives 58A 1 12.8 Colonel Edouard Travers Leprohon Diary, 14 March 1918.
33. CWM Archives, H.H. Burrell Diary, 19 September 1916.
34. CWM Archives, H.S. Spencer Diary, 3 May 1917.
35. *Ibid.* 5 May 1917.
36. *Ibid.* 4 May 1917.
37. Interview with Lloyd Wickwire by author, 4 November 1998.
38. CWM Archives, Captain Fidler Diary, 7 June May 1916.
39. CWM Archives, H.S. Spencer Diary, 5-6 May 1917.
40. Kludas, *Great Passenger Ships*, p. 184-185.
41. Hayes, *Hull Down*, p. 207.
42. *Ibid.* p. 207.
43. NAC RG 24 Vol. 3723 1048-21-24 vol. 4. Navy Yard, Halifax, to Naval Service Headquarters, Ottawa, 23 April 1917.
44. *Ibid.* Vol. 3723, 1048-21-24 vol. 3. Admiralty London to Naval Service Headquarters, Ottawa, 16 May 1916.
45. *Ibid.* R. M. Stephens, Halifax, to Maj. Gen. G. W. Gwatkin, Chief of General Staff, Department of Militia and Defence, Ottawa, 10 May 1917.
46. CWM Archives, Captain Fidler Diary, 2 June 1916.
47. CWM Archives, H. H. Burrell Diary, 20 September 1916.
48. Wickwire Interview, 4 November 1998.
49. CWM Archives, Colonel Leprohon Diary, 18 March 1918.
50. *Ibid.* 8 October 1918.
51. Gray Family Collection, John Gray Diary, 14-15 May 1919.
52. CWM Archives, H.H. Burrell Diary, 18 September 1916.
53. NAC RG 24 Vol. 3723, 1048-21-24, vol. 5. MacDonald [?], White Star-Dominion Line to Commander R.L. Stephens, Naval Service Headquarters, Ottawa, 16 November 1917.
54. Hayes, *Hull Down*, p. 203.
55. NAC RG 24 Vol. 3723 1048-21-24 vol. 6. Passenger Department, White Star-Dominion Line, to Chief of Staff, Naval Service Headquarters, Ottawa, 24 November 1917.
56. *Ibid.* vol. 5. Navy Yard, Halifax, to Naval Service Headquarters, Ottawa, 24 November 1917.
57. *Ibid.* vol. 3. Major E.J. Renaud, Canadian Ordnance Depot, Kent, to the Director of Transports, Admiralty, London, 7 March 1917.
58. *Ibid.* Admiralty, London to Naval Service Headquarters. Ottawa, 5 April 1917.
59. *Ibid.* Deciphered message, Admiralty, London to Naval Service Headquarters, Ottawa, June 1918
60. CWM Archives, H.H. Burrell Diary, 19 September 1916.
61. CWM Archives, Captain Fidler Diary, 2 June 1916.
62. CWM Archives, H.H. Burrell Diary, 22 September 1916.
63. CWM Archives, Captain Fidler Diary, 5 June 1916.
64. CWM Archives, H.S. Spencer Diary, 7 May 1917.
65. Hayes, *Hull Down*, p. 201.
66. NAC RG 150 Vol. 353, File FD 91, Captain K.H. Van Norman, CAMC, to AMD2. Report on Sailing No. 91, 9 December 1918.
67. *Ibid.* RG 24 Vol. 3723, 1048-21-24 vol. 3, W.F. Moore, Quebec to E.H. Scammel, Military Hospitals Commission, Ottawa, 13 October 1916.
68. *Ibid.* G.J. Desbarats, Deputy Minister, Naval Service Headquarters, Ottawa to Secretary, Military Hospitals Commission, 22 November 1916.
69. *Ibid.* RG 150 Vol. 349, Capt. W.B. McDermott, CAMC, SMO, War Diary, 7-20 March 1918.
70. *Ibid.* RG 150 Vol. 352 FD 86, Lt. Col. F.C. Bell, AMD to Capt. Van Norman, CAMC, 6 Jan. 1919.
71. S. Harding, *Great Liners at War*, (Osceola, WI: Motorbooks, 1997), p. 89.
72. Hayes, *Hull Down*, p. 221.
73. NAC RG 150 Vol. 349 FD 2. Captain, for Director of Supplies & Transport, OMFC, London to DMS, Canadians, 24 January 1918.
74. Hayes, *Hull Down*, p. 233.
75. NAC RG 150 Vol. 353 FD 91, Lt.-Col. P.K. Menzies, CAMC, SMO, HMS Olympic, Toronto to DGMS Canadians AMD, London, 19 December 1918.
76. A. Lismer to E. Brown, 24 December 1918, in Gemey Kelly, *Arthur Lismer: Nova Scotia, 1916-1919*, (Halifax: Dalhousie Art Gallery, 1982), p. 27.
77. Hayes, *Hull Down*, p. 243.
78. Gray Family Collection, John Gray Diary, 10 May 1919.
79. T.M. McCluskey, M. Sharpe, and L. Marriott, *Titanic & Her Sisters Olympic & Britannic*, (London: PRC Publishing, 1999), p. 208-223.
80. Internet 12 December 2001 <www.celebritycruiseweb.com/celebrityfleet.millennium1.html>.
81. Hayes, *Hull Down*, p. 242.

David Gray is an independent Ottawa researcher specializing in Arctic biology and history.