



President's Message

When I agreed to be Vice-President of the CCS, no one told me I would have a Presidential column for the Newsletter. Both CCS business and my personal and professional life have crowded the time available for this column. A few thoughts:

Thanks to ongoing executive members who have laid the foundation for which our organization will continue to grow. Not the least of which in the past two years has been the formulation and adoption of the new constitution which was adopted at the May '94 annual meeting. Congratulations to all this fall.

Welcome to the new executive members; you have the opportunity for Presidential observation to date, the ability to fill them.

See other portions of this newsletter for progress reports on the current endeavour, the CCS Fall '94 Peterborough safari, the September conference in Peterborough, and the 1996 CCS *Great Lakes* conference.

Enlarged Presidential remarks will emerge in the next newsletter.

Norman Macdonald

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Peterborough 20-23 September 1994 - International Festival of the Great Lakes

Last minute reminder! As mentioned in the March '94 CCS Newsletter, the Peterborough Convention honours the 90th anniversary of the Peterborough Lock.

This year's Spring Tour, following the Annual General Meeting members, via Farr Coach Lines (our favourite charter coach) to the Buffalo waterfront. Buffalo had been planned as a destination where we were finally able to take in what the waterfront had to offer. The highlight being Buffalo's original lighthouse built in 1833. The tour was at the Buffalo and Erie County Naval and Servicemen's Park, where we met the men and women who have served during wartime, since

Our tour took us towards the Niagara River, past Chippawa through the former village of Chippawa (now incorporated into Niagara Falls). Of course, we all know that the Chippawa Creek formed part of the Welland Canal, which opened in 1829 (you just can't escape the history along the Upper Niagara River, on the Niagara Parkway, so the tour with the Niagara Parks Commission, was most enjoyable. It gave us a chance to see of the "grand and mighty Niagara," to view Navy Island (where the shaping responsible government in Canada in the days of the War of 1812 and the Rebellion of 1837-38) and Grand Island, the location of fine industrial research complexes and offices. Navy Island is in the care of The Niagara Parks Commission, while Grand Island is

Crossing over the Peace Bridge (opened 1927 to commemorate the centennial of Canada and the States) provided a panoramic view of the river into the Niagara River on the one side, and on the other, a close-up of the Rock Lock (part of the Erie Barge Canal) and the International Peace Bridge (1873), the first bridge crossing of any kind over the Upper Niagara (Bridgeburg) and Buffalo (Black Rock) and still the only rail bridge over the Niagara — the Peace Bridge is the only vehicle/pedestrian bridge.

The morning highlight was a cruise of the Buffalo waterfront on the MISS BUFFALO. A somewhat windy and cool day, with a little opportunity to "experience," in a small way, what it might be like to be on the River on a stormy day. We were able to cruise out of the harbor into Lake Erie, and into the Niagara River, under the Peace Bridge and the International Railway Bridge. Because of weather conditions we did not see the Black Rock Lock (a pity!). And as everybody made short lunches provided on board, we could look to the Canadian

past 50 years. It also featured an engrossing display from a Hill at Fort Erie, the site of a War of 1812 hospital and an archaeological excavation there. On the grounds outside, the Jet, a Fury Jet, an armored personnel carrier, an M-41 tank,

Moored in the water were the guided missile cruiser USS L. USS THE SULLIVANS, and the submarine USS CROAKER. Truly an unforgettable and sobering, even a chilling, experience. Men who sailed and fought in them during combat had to find the first time we had ever boarded such vessels, and if we thought the cruiser or destroyer, a tour of the submarine made the

The story of the USS THE SULLIVANS, launched in April 1943. The ship was named after the five Sullivan brothers who served on the USS JUNEAU. While fighting off Guadalcanal, all five other sailors, when the ship was sunk by a Japanese subma-

Our drive back took us along the American side of the Niagara Falls and across the Rainbow Bridge. Along this route we viewed the land side some of the industrial heritage along the waterfront and Niagara Falls, as we passed 19th century plants, some still boarded up or abandoned, as well as some of the adjoining class houses, churches, stores, shops, restaurants and drinkeries providing a varied streetscape, with an eye-catching architecture. railway lines, crossings and bridges, not to mention hydro t-

As we approached and entered Niagara Falls, the giants of industry loomed up on all sides, having located here, close to "the seat of the abundant and cheap electricity available nearby from power generating plants located at the Falls. The drive through the eerie feeling with some, as we realized the destructive capital the environment. Yet almost every product that we use even through these electrical and chemical industries!

Again, we were able to see Canada from another perspective. From the Niagara River to the Canadian shore. This route along the main traffic route between Buffalo and Niagara Falls for both the sharp-eyed on board were able to spot some of the early

The Executive of the CCS is working on plans to re-issue a book on the Welland Canal — H.G.J. Aitken's The Welland Canal Company: A Study in Canadian Enterprise, published by Harvard University Press in 1954. Permission has been granted by the author and Harvard U.P. for this venture, which will be published by the CCS publisher. Plans call for a photo-duplicated paper-covered book with a new preface and some corrections and additional sources. Expected publication '94, 29 November, price \$19.95. A MUST for all Welland Canal people.

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CCS U.K. Tour '96

As you know, the C.C.S. tour is being planned to coincide with the 50th anniversary celebrations of Britain's Inland Waterways Association. The International Waterways organization will be held in Britain for the anniversary celebrations. The tentative date for that meeting is 22-23 June 1996. Britain's IWA, Irish waterways, as many of the American canal associations, and representatives from France, Germany and perhaps Australia will be present. The 22nd will include the presentation of a number of papers and social activities to enable members from the various groups to meet. A field trip will be organized for the 23rd.

We now have about 25 CCS members signed up for the tour. Only members in good standing are eligible, and a \$50 per person fee is now due. A further installment of \$370 per person is now due.

A questionnaire, suggesting methods of transport, "ports of call," etc., with suggested price ranges (members must remember that prices are based on current prices, and may change by '96!) is being prepared. You must make all arrangements for the two-week tour only, but will be asked for suggestions for an optional third week's activities.

Sign up now, and start saving for our biggest-yet field trip!

CCS UK '96

c/o Mrs. Carol Gaspari, Treasurer

74 Prince Charles Drive

St. Catharines, Ont. L2N 3Z1

From the same company which produced the map of Europe (Euromapping, based in Grenoble, France), an equally impressive map of Ireland's waterways. Publication coincided with the Shannon Erne Waterway (previously the Ballinamore-Ballyvaughan) Re-opening of two-thirds of the length of the Royal Canal and the taking place shortly, giving a total of more than 1000 km. of waterways and lakes. The Irish canals were developed in the 18th and 19th centuries for communities, transporting passengers and all manner of goods and materials. Copies may be ordered (supply is limited!) from: Map Apts. 701, St. Catharines, Ont., L2R 5K6.

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Notes from Here and There

St. Catharines, Ont: Once again the concept of a Welland Canal Park, championed by member John N. Jackson has, as one would expect, been at the forefront of compiling a detailed report, complete with excellent maps, and presented to various individuals and bodies. Several stories in *The Standard-Free Press* praise this long overdue effort to achieve a comprehensive parkway along the canal with facilities at selected points, including canal viewing stands and picnic areas. Commercial developments would help to generate revenue to help in the endeavour all success!

Albany, NY: "Boaters oppose N.Y. canal fees" - "Recreation officials oppose proposals to fund development along the Erie and Champlain canals by using the waterways' locks. The fees are exorbitant, said a spokesman for an anti-fee group." A spokesman for the New York State Thruway Authority, the canal authority, said that the amount of the fees would depend on the size of each lock for a 6-metre boat or \$80 for a 7-month seasonal pass. The fees planned for April. The fees would be used to maintain and improve the canal and construct facilities - ranging from lengthening cycle paths and picnic areas to an industrial park. [abridge from *The Standard* 4 April 1994.]

Kennet & Avon Canal Walk: The 117-km K & A, which connects the Thames at Reading with the Avon at Bath, was re-opened after a year restoration. The walk along its banks has been designed by the Kennet & Avon Waterways Walk, and includes England's longest flight of locks.

[This tribute to a long-time CCS member was written by *Da Ottawa Citizen*, 20 April 1994. We have reproduced it here for members who were unaware of his passing. Robert will be in contact with him — who among us has not benefited from his humour, or has not admired his incredible energy, striding banks, or gliding along quiet canal waters, on our CCS field

The man who gave Canadians the National Building Code, making public buildings safer, died in Ottawa of a stroke Sunday.

Legget was director of the National Research Council of Canada's Building Research from 1947 until his retirement in 1969. He was a civil engineering university professor and author of 16 books.

Legget's most popular book was *Rideau Waterway*, a history of the Rideau Canal. A new book about the Mackenzie Valley

Canadians see Legget's work whenever they enter a subway, travel on the Toronto subway, hear a smoke alarm or see a crane on a construction site.

After the Second World War, Legget predicted a building code. "Public buildings need to be safer," said George Seaden, director of the National Building in Construction.

"For the building code to be current, he said it had to be based on the best science one could imagine," Seaden said. "Mr. Legget's work is what has become part of the Canadian construction system."

Carl Crawford, a colleague from 1949 until 1969, said Legget's work became the model for all provincial construction codes.

"Canada is the only country of its size that has one model building code. Americans have four codes depending on the region," Crawford said.

Born in Liverpool, England of Scottish parents, Legget worked on a hydro project in Northern Ontario in 1929.

Legget taught at Queen's University, and in 1937 he worked on the Rideau Canal. But the war intervened. In the summer of 1940, he was sent to the Territories to work on a wartime-transportation project on the Mackenzie River. Legget completed a book about the river.

In 1947, the federal government hired Legget to establish the National Building Research.

Legget's son David said his father and other NRC researchers designed some houses that were to disappear because of the construction

Canadian Inland Navigation System," presented to the Canadian Centennial Conference in Montreal, May 1989. The authors and E. Dumalo, have graciously agreed to the use of parts of

The Seaway (cont'd)

Special precautions had to be taken when pouring concrete. The shale there tended to dessicate readily upon exposure but not pour right after blasting, then the shale surface had to be

The drilling and blasting operations went smoothly except in Bridge piers where great caution was exercised, and also with Beauharnois. At Beauharnois, it was not the proximity of steel rather the rock itself, the sandstone there being very abrasive sharpened sometimes only after 10 feet (3.1 m) of penetration tear of shovel teeth and dozer blades. The abrasive nature of numerous fault zones reduced drill outputs to but several until an oxygen lance was used that production got back up to 38.1 m per shift — but it was expensive. The excavation flight locks had been built, but a flight configuration was abandoned for reasons. Unless twinned, single flight locks are operational locks.

Not one of the four bridges in the Montreal area could meet for ship masts. This was to be achieved by various means, but used for the Jacques Cartier Bridge. The southern part of the (24.4 m) to satisfy clearance requirement. In all 14 spans, over affected. The spans were jacked in three stages, the final stage through-truss span displaced the existing deck span. The stage translating the two spans was 4 ft. (1.2 m). The distance of 7 operation was done in 4 foot increments, and the most dramatic seemed to some persons, to be the jettison of the links used in maintained on the bridge except for the five hours it took to translation took place in the early hours of a Sunday morning

The Victoria Bridge was another story, being a combined road for grades left the raising of spans out the question. Instead constructed so as not to disrupt any traffic. Two massive vertical

1979 of just over 66 million tonnes. This is dramatic proof of the system and a tribute to its builders and operators.

Looking Ahead

Water transport is the least costly and most efficient means and has a minimal effect on the environment. It is expected to be true and that demand will continue to grow with the economy.

The size of the Seaway locks was in effect set when the Welland was built before the "Great War". The forward thinking of that time has allowed the present system handling 26,000 tonnes (cargo) vessels has stood the test of time to come.

However, some time in the early years of the next century there will be a fifth generation of locks and canals and therefore, a real challenge will be put to engineers, marine architects, mariners and the shipping industry to change the size and configuration of locks and ships. So with pride in the past and confidence in the future, we can look forward to an even greater waterway system in the twenty-first century.

[Editor's Note: As is well known, the authors' optimistic prediction of future traffic has declined to the point where the future at least the next 20 years is in doubt. One can only hope that the economy will soon take a turn for the better and the future of the Welland, and of the Seaway as a whole, can be assured.]

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CCS Fall'94 Expedition to Peter

As of today's cleaning out of our postal box, 32 CCS members
September 17-18 *Great Peterborough Expedition*. This is enough
financially viable, but there is still room for more on the bus
facilities and cruises. Although the Holiday Inn will be releasing
of rooms in early September, they will still honour the public
the extent that capacity exists.

Three members will join us for the Sunday portion only, meeting
leaving their cars) at the Holiday Inn, for the bus tour to York
to Mount Julian cruise, and brunch at Viamede. To reunite
homecoming bus from Viamede will detour via the Holiday Inn
this portion of the trip. A few more short-trippers can be accommodated
capacity exists in our 44-seat bus beyond the seating needs of
me to confirm capacity and send your cheque and fuschia for

In answer to questions, the returning bus WILL stop to disembark
York Mills TTC station. Pardon the omission in the original
of the "R" in our Postal Code — this should read L2R 7P7.

Will look forward to seeing you on September 17th.

Norman Macdonald

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I/ We enclose my/ our membership fee of \$ _____

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