



The Great Lakes - St. Lawrence Seaway System
Le réseau Grands Lacs - Voie maritime du Saint-Laurent

2009 - NOTICE TO SHIPPING #2

NIAGARA REGION
WELLAND CANAL

THIS NOTICE CONTAINS THE FOLLOWING:

1. TESTING OF "HANDS FREE MOORING EQUIPMENT" IN LOCK 7

2. TESTING OF "SELF SPOTTING" IN LOCK 2, 3 & 7

3. TESTING "VESSELS ABILITY TO STOP WITHOUT USE OF MOORING LINES" IN LOCKS 1, 2, 3 & 7

4. TESTING OF "LATER HYDRAULIC ASSIST" IN LOCKS 1, 2, 3 & 7

1. HANDS FREE MOORING IN LOCK 7:

During the 2008 navigation season The St. Lawrence Seaway Management Corporation tested and evaluated a modified "**MoorMaster 200LS hands-free vacuum pad mooring system**". Valuable information was gathered thanks to the excellent cooperation from all those that participated in the many tests that were conducted. Using the information / feedback gathered, the "MoorMaster 200LS" system will be modified to better meet the demands of the mooring process. In addition to these modifications, two additional units will be installed at Lock 7 thereby providing up to four units for securing vessels. These two new units will be installed 10m north and south of the centre line so that each of the four units is 20m apart. It is anticipated that testing using four units will commence in August. In addition, testing using the two units that were in service during 2008 will begin as soon as they have been modified as stated above.

Additional information will be provided when the testing start date becomes clearer.

From the start of the navigation season, in Lock 7 only, some vessels may be asked to stop at a different location in the lock than normal. This is necessary to prevent the vessel's mooring wires from making contact with the hands-free units. Instructions to this effect will be given to the vessel prior to entering the lock.

2. SELF SPOTTING IN LOCKS 2, 3 & 7:

Testing of the Vessel Self Spotting System, (VSSS), will begin at Lock 7 on April 29, 2009 and at Locks 2 and 3 after the equipment has been installed at these two locations sometime in May 2009. This equipment uses eye safe laser ranging technology, located at both ends of the lock, to recognize the foremost portion of the vessel's hull and estimate its position in the lock. The vessel's position will be updated dynamically and displayed on both LED panels, located on the tie up side of the lock, as the vessel progresses to its final mooring position.

Masters / Pilots are asked to provide any comments / concerns with respect to the vessel self spotting system directly to the lock crew who will record them on the appropriate form.

The St. Lawrence Seaway Management Corporation
Corporation de Gestion de la Voie Maritime du Saint-Laurent

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Note: Masters / Pilots should be aware that equipment for these new technologies are installed close to the lock walls which could be damaged if any part of the vessel is allowed to sufficiently overhang the lock wall. Therefore, extreme caution is to be exercised when maneuvering inside the lock chamber.

3. TESTING “VESSELS ABILITY TO STOP WITHOUT USE OF MOORING LINES” IN LOCKS 1, 2, 3 & 7

A critical component of the development of the Hands Free Mooring equipment is to test how well vessels can come into lock structures, ‘STOP’ at their designated final mooring position and ‘HOLD’ their position within 1 metre of the lock wall without using mooring lines. The St Lawrence Seaway Management Corporation will begin this testing on April 6, 2009, at Locks 1, 2, 3 & 7 and it is anticipated that the testing will continue until the end of the 2009 navigation season. During testing there will be no vessel length restriction in either direction.

Operations Control Centre personnel will confirm with Masters / Pilots at Lock 8 downbound and Call-in Point 15 upbound that their vessel will be tested at Locks 1, 2, 3 and 7. Particulars of the test will be provided prior to the vessels entry into the lock.

Masters / Pilots are asked to provide any comments / concerns with respect to the tests directly to the lock crew who will record them on the appropriate form.

4. TESTING “LATERAL HYDRAULIC ASSIST” IN LOCKS 1, 2, 3 & 7

As part of an overall Hands Free Mooring strategy the SLSMC will be, on a test basis beginning sometime during the 2009 navigation season, reintroducing the use of a ‘Lateral Hydraulic Assist’ designed to assist vessels in the upbound direction to keep to the mooring side of the lock chamber. It should be noted that the “Lateral Hydraulic Assist” had been in common use until it was discontinued a number of years ago. New technology, recently installed, at the locks has opened the door for the reintroduction and testing of this type of Assist. The ‘Lateral Hydraulic Assist’ is activated when the stem of the upbound vessel passes the extreme north end of the lock wall. Once the operation is initiated the discharge valves at the lower end of the lock move to the fully closed position and the upper end tie-up side valves open to 0.38m.

This valve opening permits the water to flow through the filling culverts, pass under the vessel, and deflect off the opposite wall, then return in a lateral motion to create a force on the side of the vessel. This force keeps the vessel to the mooring side of the lock.

Masters / Pilots involved in testing are asked to provide any comments / concerns with respect to the tests directly to the lock crew who will record them on the appropriate form.

Note: Participation in the testing as outlined in this notice is important to the overall success of these new technologies and the efforts of the Masters / Pilots is encouraged and appreciated.

John W. Chalmers
Senior Coordinator, Regional Operations Services

St. Catharines, Ontario
March 30, 2009

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