

THE LEGAL LIABILITY OF THE CHARTMAKER

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ABSTRACT

Recent developments in the law have imposed increased liability and responsibility on Government Departments and Agencies providing services to the public. The Canadian Hydrographic Service as the Crown Agency providing reliable information to the marine navigator must be aware of the legal responsibilities and duties and the extent to which the Crown may be liable for shipping casualties and other marine accidents.

The degree of reliance placed on charts and other nautical publications of the C.H.S. potentially expose the Government of Canada, under the Crown Liability Act to claims by ship owners, cargo owners for damages ranging up to many millions of dollars based upon misleading or inaccurate charts. Members of the C.H.S. need to be aware of this responsibility and take all necessary measures to protect and to limit this potential exposure of the Government of Canada. The importance of the C.H.S. establishing standards of excellence and providing for mechanisms to ensure that these standards of excellence are met is emphasized. Special reference is made to the legal problems and other scientific investigations and the manner by which the Crown can discharge its responsibility and limit its liability therefor.

The heavy reliance by Government and the marine public on the hydrographer's creditability and expertise is also described as well as the use to which the information and results are put. The legal problems associated with changing technology, new procedures and the updating of older charts and publications to meet modern charting standards are reviewed and discussed.

RÉSUMÉ

Des récentes réformes à la législation ont imposées de plus grandes responsabilités aux sociétés et ministères du Gouvernement qui assurent des services au grand public. En fournissant de l'information fiable aux navigateurs maritimes, le Service hydrographique du Canada, à titre de société de la Couronne, ne doit pas ignorer ses responsabilités et engagements juridiques et jusqu'à quel point le Gouvernement fédéral peut être tenu responsable d'accidents de navires et autres incidents maritimes.

Le degré de fiabilité que l'on accorde aux cartes et autres publications nautiques du S.H.C. peut, en vertu de la Loi sur la responsabilité de la Couronne, obliger le Gouvernement canadien à respecter les demandes d'indemnité de plusieurs millions de dollars, provenant des propriétaires de navires ou de cargos pour des dommages causés par des cartes erronées ou inexactes. Il faut ainsi sensibiliser les employés du S.H.C. à cette responsabilité et prendre les mesures nécessaires pour protéger le Gouvernement de cette éventualité, ou tenter du moins de la limiter. L'accent doit être mis sur l'importance pour le S.H.C. d'établir des normes d'excellence et de prévoir les dispositions visant à assurer qu'elles sont respectées. Nous nous reportons notamment aux problèmes d'ordre juridique qui sont reliés à l'adjudication de contrats de levés ou d'autres enquêtes scientifiques et la façon selon laquelle la Couronne peut s'acquitter de ses obligations et ainsi limiter son degré de responsabilité.

La grande fiabilité du Gouvernement et des employés maritimes, pour ce qui est de la crédibilité et de l'expertise des hydrographes, y est également décrite, de même que l'utilisation de l'information et des résultats. Les litiges relatifs aux changements apportés aux techniques, aux nouvelles procédures et à la mise à jour des vieilles cartes et publications, afin de satisfaire aux normes modernes de la cartographie, sont également passées en revue et font l'objet de discussions.

Admiral Beaufort's Revenge

1. My topic is the legal liability of the hydrographer.

2. My text is taken from the eleventh edition (1970) of the Encyclopaedia Britannica. It is written by Captain Thomas Hull, formerly Superintendent of Admiralty Charts. He writes:

"The ocean and general charts are compiled and drawn at the Hydrographic Office, and as originals, existing charts, latest surveys and maps, have to be consulted, their compilation requires considerable experience and is a pains-taking work, for the compiler has to decide what to omit, what to insert, and to arrange the necessary names in such a manner that while full information is given, the features of the coast are not interfered with. As a very slight error in the position of a light or buoy, dot, cross or figure, might lead to grave disaster, every symbol on the admiralty chart has been delineated with great care and consideration, and no pains are spared in the effort to lay before the public the labours of the nautical surveyors and explorers not only of England, but of the maritime world; reducing their various styles

into a comprehensive system furnishing the intelligent seaman with an intelligible guide."

3. My Subject Matter is hydrography which I define as follows:

HYDROGRAPHY (Gr. vovp, water, and ypaoelv, to write), the science dealing with all the waters of the earth's surface, including the description of their physical features and conditions; the preparation of charts and maps showing the position of lakes, rivers, seas and oceans, the contour of the seabottom, the position of shallows, deeps, reefs and the direction and volume of currents; a scientific description of the position, volume, configuration, motion and condition of all the waters of the earth.

4. The chart is the product of the hydrographers labours. The first Admiralty chart was published in 1801. The Admiralty had to be persuaded to put their charts on public sale, a major change from the days when national security was considered paramount. J.D. Potter Ltd., in the City of London, sold charts for 150 years. Potter's advertise that their chart warehouse has a stock of 65,000 charts. It is fair to say that millions of copies of charts are sold worldwide every year.

The chart is, or used to be, the navigators working document. Its objective must be clarity. The battle has always been to avoid encumbering the chart with detail which is not essential for its navigation purpose.

Unlike other surveys, the chart shows the navigator what he cannot see. The chart shows him the shape and depth of the bottom. For practical purposes, the navigator must put his faith in the chart to tell him where he can safely go and where he cannot go. The navigator may have no other means of knowing.

The chart's reputation for accuracy is legend. It is said that the first hydrographer of the Navy, Alexander Dalrymple, was hesitant to publish any material of which he was in doubt or of which he had no personal knowledge. Admiral Beaufort, we are told, personally signed each and every chart published during his 26 years as Naval Hydrographer.

Even though Dalrymple may have been meticulous, these high standards of integrity and accuracy are so well established today that no backsliding will be excused.

I have taken some of your valuable time to set this stage for my second discussion of the hydrographer's legal responsibility.

My purpose in doing so is to emphasize once again the reliance the navigator places on the marine chart and accuracy of the information depicted thereon.

When I last spoke to some of you in Victoria in 1969, I was able to say, and did say, "that the courts in Canada have not dealt with a case involving an allegation of negligence on the part of the chartmaker. If and when that case arises (and we hope it will not arise) it may be possible to give more advice."

As you may know, my last prediction was only good for five years.

Before I discuss the case of the GOLDEN ROBIN, I will outline the legal basis to which under the laws of Canada, the chartmaker (and more importantly, his employer), is exposed.

- A. Legal liability may be based either on contract or in tort ("delict" in province of Quebec).
- B. In contract, the liability will arise if there is an agreement to supply an accurate chart and the supplier provides an inaccurate chart. The other person can then claim there has been breach of contract and can sue the supplier of the chart for any damages resulting from the breach. This type of claim would be rare.
- C. The more common case is a claim in negligence. The user of the chart sues the Crown for the negligence of a person to act carefully where the law imposes on him a duty to act carefully.
- D. A chartmaker or hydrographer is a professional and, in law, is expected to exercise the skill and competence of an ordinarily competent chartmaker or hydrographer.
- E. Under the Crown Liability Act, the Crown (H.M.Q.) is responsible for the negligence of the Crown-employed hydrographer and for any damages suffered by the chart-user caused by that negligence.
- F. To succeed, the chart-user must establish:
 1. He relied on the accuracy of the chart;
 2. The chart was inaccurate or misleading;
 3. The chart was inaccurate because the hydrographer was careless;
 4. The damages claimed were caused by that inaccuracy and not by

an error of navigation.

In my 1969 paper, I reviewed a number of these issues in detail viz:

1. The duty to be careful;
2. The applicable standards and the application of those standards to specific facts;
3. The use and misuse of charts by navigators;
4. Warnings on charts and disclaimers of liabilities. I refer you to my 1969 paper for that discussion.

Now the GOLDEN ROBIN (Ex. Esso Oxford) which grounded on Dalhousie Island while approaching the harbour on a beautifully clear morning, 30 Sept. 1974. The owners sued the Crown under the Crown Liability Act for \$2,000,000 for the ship as a constructive total loss. The claim was based on various allegations including a claim that C.H.S. Chart 4426 was both incorrect and misleading, as read in conjunction with two Notices to Mariners, which were alleged to be incomplete or inaccurate.

The trial was heard in Montreal in Sept., 1980 and the trial judge, Mr. Justice Addy, of the Federal Court of Canada, on Nov. 26, 1980, dismissed the action. The case is now under appeal. In doing so he did make some useful and some helpful remarks about charts in general and about the allegations in particular.

At page 16, he points out:

"Charts are representations of the nature, character and position of navigational aids as well as of the land and bottom configuration, depths and other features of both the shore and the sea bottom. The information given speaks, of course, as of the date of the last survey which is always indicated on the face of the chart. The last survey for the chart in issue was 1966, eight years previous to the accident. The previous surveys were taken in 1923 and 1964. In addition, a chart is to be read subject to all reservations shown on the chart itself and subject to any instructions, notices, cautions and other hydrographic and navigational information communicated in conjunction with, previous to or subsequent to the publication of the chart and which are required to be read with it.

All information contained on a chart is there primarily for navigational purposes. It is, therefore, addressed to mariners, that is, persons who are presumed to possess a working knowledge of seamanship, navigation and related subjects such as winds, tides

and currents and who are, therefore, presumed to read and apply the information on the chart in the light of that expertise.

With regard to soundings, they are not a standing offer of depth, that is, they do not constitute guarantees that the depths shown will remain or be maintained, unless there is representation to that effect on the chart."

Addy J. reviews the survey evidence on which the Notices to Mariners were issued, and at page 20, says: "On examining the 1973 survey, there is no doubt that, at that time also, the defendant's servants in the Hydrographic Survey Services, if they even looked at the document, could not help but be fully aware that a shallow depth of some 26 feet extended across the range line to a distance of some 25 feet south of the line. The chart itself, since it was coloured white at that point, represented that all depths for some distance north of and on the range line as well as south of it were over 30 feet above chart datum and, furthermore, the nearest sounding figure showed seven fathoms or 42 feet above datum.

I reject the evidence of the expert hydrographer of the defendant who stated that the reason why the chart itself was not amended either in 1972, 1973 or before the accident was because, being of such a small scale, that is 1:36,360, more information could not be inserted without cluttering it up and rendering it difficult to read and decipher. In the first place, the warning could have been accomplished very easily by a proper Notice to Mariners describing the extension of the shoal as discovered in 1972, much along the same lines as the inter-departmental report quoted above, rather than by merely indicating the presence of two-spot soundings. In the second place, and more importantly, in 1976 an amendment to the chart was published extending the 30-foot contour by a dotted line well south of the range line and the chart remains every bit as clear and legible as it was previous to the amendment.

It is not an answer to say that no hydrographer contradicted this evidence at trial. A chart is not addressed merely to hydrographers."

Finally at page 24, Addy J. sets out the Court's opinion of the chart:

"In the case at Bar, not only is the representation made for a public purpose or object (i.e., aiding and assisting navigation in the area) as opposed to a private object (i.e., advising an individual), but the representation itself is made to and intended for the public,

namely all mariners who might be expected to use the chart. It was also made with the full knowledge and expectation on the part of the authority making it, that it will be relied on by the masters of ships and other craft sailing those waters, to ensure the safety of their vessel, cargo and passengers. Where such public representations for public purposes are made, with full expectation of a reliance on the representations, there is no need for the existence of any greater particular or special relationship between the person making them and person relying on them for a duty to take care to arise. In addition, where, as in the present case, the safety of many lives and serious damage to property might well be at stake, and the breach of duty may thus result in very serious consequences, the degree of care must be correspondingly high."

The crux of the case appears on page 22. The Court finds that the two Notices to Mariners issued prior to the casualty were misleading in the context of hydrographer's knowledge at that time. As they dealt with soundings at or near a recommended track shown on the chart, a "critical and sensitive area" in the words of the court.

In the result, the court did not have to decide whether the hydrographer was liable in tort or not (p. 27). The Court found at page 36 that neither the Captain nor the Pilot ever consulted the chart and neither were, in fact, misled by the misinformation in Notices to Mariners.

So the issue is still open or is it?

As this case is under appeal, we must wait the final decision of the Court. There is always a possibility of further appeal to the Supreme Court of Canada which could take several years.

There are and will be other cases. In the world of modern shipping, and modern financing, shipowners are compelled to increase the earning capacity of their ship. To do so, it is likely that margins of safety and prudence will be compromised. The result can be the "excessive dependence" on the accuracy of the information on the chart.

Limitation of Legal Liability

You may ask why should a hydrographer or his employer render themselves liable for millions of dollars of damage for supplying a chart at a price of \$5.00. This potential liability has also concerned some courts. In 1951, an English judge said this: "The Captain of the Queen Mary, in reliance on a map (i.e. a chart) and having no opportunity of checking it by reference to another chart steers her on the unsuspected

rock, and she becomes a total loss." Is the unfortunate hydrographer to be liable to her owners in negligence for some millions of damage? If so, people in the future will think twice before making maps. Hydrography would become an ultra-hazardous occupation.

In 1965, I raised with the then Dominion Hydrographer, Mr. Gray, the possibility of the C.H.S. putting a cautionary note on the charts to the effect that Her Majesty does not assume any responsibility for any errors or omissions that may exist on the chart. Mr. Gray expressed the opinion that such a note would be "a retrograde step greatly lowering our prestige and not be in conformation with the policy with other major hydrographic offices or of the International Bureau". At that time, the total claims being made against the C.H.S. amounted to \$500.00. Now the total claims against the C.H.S. are in the neighbourhood of ten million dollars. Assuming that there is no change in policy, the question remains as to whether the chart should be more explicit as to what it shows and, more importantly, what it does not show. Although each C.H.S. chart refers the navigator to Chart No. 1 (now a folder), I find that in practice, very few ships masters admit that they have ever seen chart No. 1 let alone read it in its entirety. This is a fact that must be reckoned with.

Contract Hydrography

It is an unfortunate sign of the times that hydrography can be privatized.

When the issue was raised in 1977, I provided an opinion to the Dominion Hydrographer which concluded with this paragraph:

"If all the essential steps of chart making are not carried on by the government, with government resources and government people, then the ability to provide legal proof of the data exhibited on a chart may be impossible where the private industry who did the work has gone bankrupt or has ceased to exist and its records destroyed. Essentially, the problem with these management techniques is that they do not give any weight to the quality of the survey work performed, the historical continuity of the surveys and the promotion of national and international standards of hydrography and chart making."

In spite of my advice, the Treasury Board directed the Dominion Hydrographer to contract out some hydrographic surveys. One of the most recent is the Survey of Lake Manitoba, Manitoba the contract for which I have read with interest. I am afraid to say that the

difficulties raised in my letter have not been solved. The key question of legal liability is left largely in doubt. The contractor's warranty is only as to competency and qualification. The quality of service is only "at least equal to that which contractors generally would expect of a competent contractor in a like situation". Such a measure of legal liability cannot be tested in the courts because the concept is elliptical.

Furthermore, the contractor is not required to insure himself against future liabilities that may arise because the Crown relied on the data produced by the contractor which may turn out to be faulty. On this point, I should say that, in the good old days, such a situation would not arise. In 1766 the Royal Society proposed an expedition in the South Pacific. Dalrymple was suggested to be the leader. The Admiralty, however, insisted that the expedition be lead by a naval officer who turned out to be Captain James Cook who sailed in 1768 in command of what was to be the first of his three great voyages of discovery.

Conclusion

The fact is that allegations of negligence are being levelled at hydrographers in many marine casualties. Although we have escaped so far, the C.H.S. must be prepared to defend its actions and standards in court. There is no doubt, in my view, that hydrography has become an ultra-hazardous profession and the C.H.S. must govern itself accordingly.

A final word - in this modern age of digitizers, electronic distance measuring equipment, mini-computers and automated plotting, the hydrographer should not be afraid of getting his feet wet.

The opinions expressed in this paper are entirely those of the author and are not intended to represent the views of the Government of Canada nor the Department of Justice.