Part I - Updated Estimate of Fair Market Value of the S.S. Keewatin in September 2018

05 October 2018





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5 October 2018

The RJ and Diane Peterson Keewatin Foundation 311 Talbot Street PO Box 189 Port McNicoll, ON L0K 1R0

Ladies & Gentlemen

We are pleased to enclose an Updated Valuation Report, setting out, at September 2018, our Estimate of Fair Market Value of the Museum Ship S.S. Keewatin, which its owner, Skyline (Port McNicoll) Development Inc., intends to donate to the RJ and Diane Peterson Keewatin Foundation (the "Foundation"). It is prepared to accompany an application by the Foundation for the Canadian Cultural Property Export Review Board.

This Updated Valuation Report, for the reasons set out in it, estimates the Fair Market Value of a proposed donation of the S.S. Keewatin to the Foundation at FORTY-EIGHT MILLION FOUR HUNDRED AND SEVENTY-FIVE THOUSAND DOLLARS (\$48,475,000) and the effective date is the date of this Report.

The information provided from Other Sources is described in the various underlying reports and in the Section "Documents Used". The authenticity of the Ship is based on the Declaration of Authenticity prepared by K. Coley Keeble as cited above.

This appraisal estimates the Fair Market Value of the physical property and any acquired characteristics of value. The scope of work is described in Part I of the Report in a Section, starting on Page 10, under that heading and the individual underlying valuation reports in Part II of the Report.

Yours very truly,

Corporate Valuation Services Limited

Per

James P. Catty, MA, CPA•CA, CBV, CPA/ABV, CFA, ICVS, CGMA, CFE

President

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ESTIMATE OF FAIR MARKET VALUE

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ENGAGEMENT

Skyline (Port McNicoll) Development Inc. ("Skyline"), the owner of the 1907 Museum Ship S.S. Keewatin ("Keewatin" or the "Ship), intends to donate it to the RJ and Diane Peterson Keewatin Foundation (the "Foundation"). On behalf of the Foundation, Skyline, by an Engagement Letter approved on 19 September 2018, instructed Corporate Valuation Services Limited ("CVS) to prepare an update (the "Report"), as of September 2018 (the "Valuation Date"), to our Comprehensive Valuation Report dated 30 January, 2018 (the "Original Report"), setting out its current Estimate of Fair Market Value of the Ship, still anchored at Port McNicoll, Ontario.

The Foundation is a registered Canadian charity responsible for the care, operation and promotion of the Keewatin. Its mission is to promote participation and passion for the Ship. The Foundation aims to educate the public on the Keewatin's history and its contribution to Canada as well as to ensure that the Edwardian vessel has long-term viability, while remaining responsible and respectful of the Ship's heritage. It also takes fiscal responsibility for the Keewatin's preservation and continued operation.

The Foundation's goal is to be recognized as a role-model charitable organization in terms of governance, sponsorship and financial strength and to offer the ultimate marine-based historic entertainment experience by which all similar venues are measured. It strives to be the accessible custodian of generations of dreams and memories that is being enhanced by expanding the Keewatin into a "living facility".

It is operated by a group of dedicated volunteers from the community for the benefit of all, providing a venue for education, celebration and various events that will reinforce the values and traditions of the Maritime History of the Great Lakes and the importance of the contributions made to the development of Canada as a whole. The Foundation therefore intends to apply to have the Ship classified as an object of cultural property considered to be of "Outstanding Significance and National Importance" by the Canadian Cultural Property Export Review Board (the "Board").

This Updated Valuation Report, dated 5 October 2018, has been prepared in accordance with the Standards of the Canadian Institute of Business Valuators and the (US) Uniform Standards of Appraisal Practice (USPAP). It adopts the Board's definitions of Fair Market Value set out in the May 2015 Application Guide "Certification of Cultural Property for Income Tax Purposes by the Canadian Cultural Property Export Review Board" (the "Guide"):

"The highest price, expressed in terms of money, that a property would bring in an open and unrestricted market, between a willing buyer and a willing seller who are both knowledgeable, informed, and prudent, and who are acting independently of each other."

The application of this definition is discussed in the Section Fair Market Value below.

An old ship tied up at dockside, without attention, will decay and eventually sink; recent practice has been to form a preservation organization, solicit donations, organize volunteer labour from enthusiasts, and open the restored vessel to the public. Since the S.S. Keewatin returned to Port McNicoll in June 2012, the Foundation has undertaken this task.

During 2015, CVS first visited the Ship, and on February 4, 2016 prepared a Preliminary Valuation Report establishing a Fair Market Value of \$31,500,000 for the Keewatin. In November 2017, all of the experts involved visited the Ship for the purpose of the Original Report. For this update, 10 months later, only Jim Catty and Valerie Brown inspected the Ship.

This Report is Part I of the complete document. Part II is the Original Report dated 30 January 2018 and addressed to the Town of Midland. It was prepared, as of November 2017, for a donation that was never completed. A full description of the S.S. Keewatin including photographs, together with its history, will be found in Appendix 3 of Part II, Pages 7 to 13 and 17 to 67.

In this Report, as in the Original Report, all amounts are in Canadian funds, unless otherwise indicated such as US\$, € (Euro) or £ (Sterling).

THE CANADIAN CULTURAL PROPERTY EXPORT REVIEW BOARD

The Canadian Cultural Property Export Review Board is an independent, quasi-judicial decision-making body that reports to Parliament through the Minister of Canadian Heritage. It was established in 1977 by the Cultural Property Export and Import Act, to determine whether an item of cultural property, such as the Ship, is of outstanding significance and national importance ("OS/NI"); the intention is to protect and preserve Canada's artistic, historic, and scientific heritage and make it accessible to the public.

The Board's mandate is to:

- certify cultural property as being of outstanding significance and national importance;
- establish export delays to provide designated organizations with an opportunity to acquire significant cultural property threatened with permanent export; and
- determine fair cash offers to purchase cultural property for refused export permits.

Cultural property refers to artistic, historic, or scientific objects that may fall into any of the following categories:

- objects recovered from the soil or waters of Canada;
- objects of ethnographic material culture;
- military objects;
- objects of applied and decorative art;
- objects of fine art;
- scientific or technological objects;
- textual records, graphic records, and audio-visual recordings; and
- musical instruments.

FAIR MARKET VALUE

As previously stated, the Board's definition of Fair Market Value is

"The highest price, expressed in terms of money, that a property would bring in an open and unrestricted market, between a willing buyer and a willing seller who are both knowledgeable, informed, and prudent, and who are acting independently of each other."

The Board considers the following factors to be implicit in this definition:

- 1. Highest price means the highest price that is consistently achieved;
- 2. The transaction occurs in the market where such properties are most commonly and consistently sold to the public;
- 3. The public is the usual purchaser or ultimate consumer;
- 4. An ultimate consumer is a person, institution or corporation who does not hold the item for subsequent resale;
- 5. The appropriate or relevant market is the most active one for the particular asset and is determined by the frequency and total number of sales;
- 6. The buyer and seller are typically motivated, where neither is under compulsion to buy or sell:
- 7. Each party is knowledgeable, informed of all of the relevant facts and acting in their own best interests;
- 8. An unrestricted and open market is one that is available to the public;
- 9. The property has been exposed to the market for an adequate period;
- 10. The transaction is not influenced by restrictions that would have a significant effect on the price; for example, a forced sale; and
- 11. Payment is in Canadian dollars.

Highest Price

The Board believes certain aspects of Fair Market Value are widely misunderstood, particularly the meaning of "highest price" and "public", and the issue of the appropriate or relevant market. Highest price means one that is consistently achieved. It does not include an extraordinary price that, when viewed in the context of the market for that asset, is an anomaly. Atypically high and low prices are irrelevant to Fair Market Value; statistically averaged prices may be distorted if the valuator includes abnormally high or low figures and the resulting value conclusion will be inaccurate. The frequency of a price being achieved and the total number of sales are most significant.

Highest price does not mean the single highest price that has ever been achieved or could conceivably be achieved. Fair Market Value reflects the highest price at which an item might reasonably be expected to change hands in the normal course of business, in the usual market for that item, and is best indicated by a consistent pattern of sales; to quote the auction world about transactions: "One is a fluke, two is a coincidence, three is a trend, four is a market."

Public equals Customary Purchaser

Within the definition, the "public" refers to the customary purchaser for the item in its existing form when not bought for resale. It does not mean all purchasers. A customary purchaser is often an individual acquiring the item at the retail level but, in some circumstances, because of the nature of the goods (e.g. uncut gemstones), the customary purchaser may also be a wholesaler buying the item for resale. A customary purchaser may be an individual, a business, a museum or an institution.

Selling Price and the Ultimate Consumer

Fair Market Value represents the amount a property would bring in an open and unrestricted market, in other words, the amount, before taxes, a buyer would pay; for this purpose, the ultimate purchaser is the end-user. When an agent acquires an object for a client, the latter is both; the relevant price for estimating Fair Market Value is the amount paid by the person who will "enjoy" the property. If an end-user purchases an object at a discount, the relevant Fair Market Value is the amount actually paid. However, a discounted amount charged to a consultant/dealer is not relevant. In auctions, a buyer's premium is customarily added to the hammer price, for Fair Market Value, that hammer price plus premium is relevant if paid by an end-user.

Which Market?

Many items, such as personal property, are traded in more than one market; establishing the most active one where sales are made to end users, is fundamental in determining Fair Market Value; to do so, the valuator must research and consider all those that are active. The appropriate market is the one in which such items are customarily purchased based on the frequency and number of sales.

For example, if an artist's work is most frequently sold through commercial galleries and only occasionally at auction, prices in the gallery market are relevant, but not those at auction. Similarly, if that artist's work is offered for sale through a gallery but mainly bought directly from his studio, the relevant prices are those charged by the studio and not at the gallery, provided that the studio market is available to the public in an open and unrestricted manner. Sales that occur in the most active market available to the public are the best indicators of Fair Market Value.

VALUATION APPROACHES

In arriving at a value for any asset, consideration should be given as to which of the numerous valuation methods are appropriate in the circumstances; those chosen to arrive at a Fair Market Value will depend on the nature and quality of the asset, and its stage of development. Whenever practical, the conclusion should be reached by confirming and combining the outcomes of more than one method.

These appropriate methods are divided into three basic approaches: Cost, Market and Income. Cost-Based amounts, which are normally found on Financial Statements, are a measure of value for only a limited range of items. However, replacement or reproduction cost is extremely useful for many capital items, such as real estate or plant & equipment.

Market-Based Values, relying on comparisons with actual sales, are preferable, because they reflect real, rather than notional transactions. However, it is often difficult to find sale prices for transactions in comparable companies, assets or securities; therefore, for financial or intangible assets, Income-Based Values related to earnings or Cash Flows are generally used as the primary figure.

The Board accepts only two valuation approaches: sales comparison and cost. One or both may be selected based on the availability of data and the purpose of the valuation. In this Valuation Report, CVS has applied both.

Sales Comparison (Market) Approach

Fair Market Values are estimated by the sales comparison approach using a process of comparing an object with similar items sold around the effective date of the valuation, in the market where they are customarily bought by the public. Such data analysis combines sale prices with their relationships to attributes that contribute to or detract from value. Supportable conclusions of value are derived by comparing the characteristics of the property being appraised with the corresponding characteristics of sold items and making adjustments to reflect relevant differences. The reliability of this approach is dependent upon the degree of similarity between the donated object and the sold items, including their physical attributes and condition, the nature of the transactions, market conditions and time & location of the sale.

Cost Approach

The cost approach is based on the principle of substitution, which states that an informed buyer would not pay more for an item than it would cost to acquire an equally desirable substitute. This approach is most typically used to estimate replacement cost for unique properties or when there is limited or no evidence of comparable sales. It compares the item being appraised with the cost to acquire, by purchase or production (e.g. by commission), a substitute that is comparable in all respects in the market and fashion in which it would customarily be acquired. Valuations of objects that are unique, oversized, site specific, or created in new media, for which there is usually a limited market, are special cases in which the production cost (including a creator's fee) may be an important factor in determining Fair Market Value.

In using this approach, the valuator must recognize that cost is not synonymous with value and that a property, such as an object certified by the Board, cannot be replaced by a new item or a reproduction. The valuator will therefore make adjustments to reflect the attributes of the appraised item that contribute to or detract from value such as condition, period, provenance, etc.

In developing an estimate of Reproduction Cost New for an asset such as the S.S. Keewatin, there are three generally accepted methods: Detail Method, Trending Method and Cost-to-Capacity Method.

Detail Method

The detail or summation method requires that a current cost new be assigned to each individual component of an asset, which is itemized or "detailed" so that the total reflects the cost new of the asset; all normal direct and indirect costs are to be included. This method was considered but rejected as no "as-built" plans of the Ship exist.

Trending Method

The trending method estimates an asset's Reproduction Cost New by applying an index or trend factor to its historical cost (the amount spent when it was first placed in service), so as to convert that expenditure into current dollars. As the original building contract in 1907 was in Pound Sterling and the many subsequent modifications in Canadian funds, no satisfactory historical cost can be established nor an appropriate index created; therefore, this method is not feasible. It has, however, been used as part of the reasoned justification.

Cost-to-Capacity Method

This method is based on the concept that the cost of similar assets of different sizes vary in a roughly linear fashion, with appropriate "valuation multiples" being obtainable from recent transactions. For the reasons previously set out, we consider it the only suitable method for the S.S. Keewatin.

Reasoned Justification

A new item or a reproduction cannot replace the individual value characteristics of an original. Therefore, the Board requires a valuator to develop a *reasoned justification* that explains how he arrived at his conclusion of value. This will take into consideration the reproduction cost as a reference point in conjunction with all other relevant factors.

Specifically, the valuator must demonstrate a relationship between the market evidence available and the object being appraised, by taking into account such factors as rarity, quality, historical significance, provenance, literature references, the importance of the creator, sales in the past few years of comparable objects by the creator, recent sales of dissimilar objects by the creator or recent sales of related objects by creators of comparable stature. In doing so, the valuator will explain any adjustments made upward or downward from market indicators to arrive at the estimated value at the Valuation Date.

The *reasoned justification* is especially important when there is a limited or non-existent market for the property, such as for a Museum Ship like the S.S. Keewatin. The valuator's role, in such cases, is to place the property within the appropriate marketplace and to explain if the property were available for sale, in which market it would sell, the existence of willing buyers, their level of interest and how much they would be prepared to pay.

To do this, the valuator needs to refer to a relevant property being sold in an identified market and justify why the item being appraised could feasibly be sold at the estimated value at the Valuation Date. As part of this exercise, the valuator may also wish to discuss the level of market activity when similar objects were available and sold.

Blockage Discount

A blockage discount is a valuation methodology to determine Fair Market Value for the donation of many similar objects in the same year by a single donor when their quantity exceeds the indicated demand. Such a discount is appropriate if their number is large in comparison with the volume generally sold annually so that they could not be moved at the typical asking prices, within a reasonable period, by experienced dealers following normal prudent business practices.

Supply and demand is fundamental to value. Markets will only absorb a certain amount of an item before they become saturated and future demand is reduced. When a large number of similar items are offered for sale at one time, there are three possible outcomes:

- 1. The price of each individual item would be lower because the supply exceeds the demand;
- 2. The price of each individual item would increase because the offering of a large collection at one time would attract buyers from many different areas; or
- 3. The price of each individual item would not be affected because there are sufficient buyers to acquire them all.

In considering a discount to reflect the possible negative effect of quantity, a valuator first determines the Fair Market Value of each item irrespective of their number, and then, if appropriate, applies a discount. The aggregate figure will generally be less than the total of the values of each individual object. In our view, no blockage discount is applicable to any of the assets included in the Ship.

Premiums/Added Value

The Board has taken the position that premiums, other than those applied by auction houses, placed on the total estimated value of a collection, do not necessarily reflect market conditions at the time of donation. Therefore, such premiums will not automatically be considered as part of Fair Market Value.

The Board reviews such situations on a case by case basis. After considering the information before it, such as the integrity of a particular collection, the impact of dismantling the collection, its relevance as a whole to the objectives of the applicant institution and hence to the Canadian heritage, the Board may decide to accept a suitable percentage increase in value, where it deems appropriate.

No premium or added value has been applied to the individual values of any of the relevant assets, but a 10% Museum Ship premium has been applied to the total of the Fair Market Values for the Hull & Structures and the Machinery, Equipment & Related Assets to reflect the special nature of Museum Ships.

SCOPE OF WORK

The Ship and all its artifacts consist of a large number of objects that have to be individually identified, recorded and appraised. Therefore, in 2017, CVS divided the valuation process into three logical elements:

- 1. Hull & Structures (the key component with a Condition Report as well as a valuation)
- 2. Machinery & Equipment and Related Assets (items essential to the operation of the Ship)
- 3. Artifacts (items, some of which were not originally part of the Ship, considered necessary to enhance a visitor's experience)

To undertake these assignments, we assembled an experienced inter-disciplinary professional team:

Jim Catty - Corporate Valuation Services Ltd. Project Leader
Tom Roberts - Compass Maritime Services LLC Hull & Structure
Ian Cameron - North American Marine, Inc. Condition Report

Gilles Moss - G.R. Moss Appraisals Inc. Machinery & Equipment

Valerie Brown - Belleholme Management Inc. Artifacts Mary Lou Quesnelle – Keewatin Archivist

Jim Catty was born in England but grew up partially in the United States. After Oxford, he moved to Canada and became a CPA with a predecessor pf PWC. From 1960 to 1971, he was in investment industry in Toronto and New York. After serving as a Special Advisor to the Minister of Finance (Canada), he has specialized in valuation work mainly about Intellectual Property. He has had assignments valuing businesses and their financial, physical & intangible assets in Canada, the United States and 11 other countries for more than 60 years. He has written over 100 articles and conference presentations.

Tom Roberts has spent more than 20 years valuing ships and wrote a case on the subject for the Harvard Business School.

Ian Cameron has been a marine engineer for over 50 years, specializing in surveys on behalf of insurers of ships' hulls and other marine risks in North America. He is accredited by the (US) Occupational Safety and Health Administration (OSHA).

Gilles Moss has been involved with the appraisal of a variety of machinery & equipment in Canada and the United States for more than 40 years.

Valerie Brown, for thirty years, valued items of personal property for Waddington's Auctioneers & Appraisers.

During November 2017, all of the experts visited the Keewatin as set out in the Original Report (Part II). In September 2018, CVS did not consider it necessary to update the Condition Report as the Foundation had maintained the Ship in excellent shape. All the other experts revised and updated their previous work products.

Details of the work undertaken by each expert are set out in their November reports in Part II:

Ian Cameron – Appendix 2

Tom Roberts – Appendix 3

Gilles Moss – Appendix 4

Valerie Brown – Appendix 5

HISTORIC SHIPS

Ships Launched in 2007

Sea travel has a long history dating back to before the Phoenicians and Homer. However, the ravages of the elements, the high cost of marine maintenance and being replaced by rail, car and aircraft resulted in the eventual destruction of nearly all ships ever built, often by sinking, but usually by being broken up with the material sold for scrap. Through intensive search as set out in Schedule 1, we were able to trace 450 ships as having been launched during 1907 - 112 years ago - in 22 countries:

Canada	9	2.0%
France	22	4.9%
Germany	28	6.2%
Netherlands	34	7.6%
Norway	13	2.9%
Russia	23	5.1%
UK	210	46.7%
US	72	16.0%
14 Countries with 5 or less	39	8.7%
	450	100.0%

Obviously, there are some we cannot trace; but, the dominance and strength of the UK production, especially in Scotland, was extreme. This is demonstrated by the CPR's decision to build the Keewatin and its sister ship, the Assiniboia, there rather than in Canada where they were to be in service. Our sample is dominated by cargo ships (25.6%) and naval vessels (24.0%), and includes those having a wide range of uses:

Naval		
Battleship	7	1.6%
Cruiser	23	5.1%
Destroyer	56	12.4%
Submarine	20	4.4%
Other	<u>2</u>	0.4%
	<u>108</u>	24.0%

Commercial		
Barge	24	5.3%
Cargo Ship	115	25.6%
Ferry	23	5.1%
Fishing Vessel	45	10.0%
Ocean Liner	19	4.2%
Steamship	16	3.6%
Tug	27	6.0%
Other	<u>6</u>	1.3%
	<u>275</u>	61.1%
Sailing Ship	13	2.9%
Service Vessel	4	0.9%
Yacht	<u>50</u>	11.1%
	<u>450</u>	100.0%

Of all those ships, only 51 (11.3%) still exist, with 169 (37.5%) having been sunk and 156 (34.7%) scrapped. Sometimes, as with the 11 that became Museum Ships, survival was because of historical significance, but more often due to luck and circumstance. If any of those Museum Ships were to be abandoned, they would join the numerous lost treasures that have been allowed to deteriorate or be destroyed by past global conflict.

Museum Ships

Vessels of historic interest are often transferred to preservation organizations operated by volunteers in locations with which they have a connection. This has been done for the 11 Museum Ships that were launched in 1907, with two from that year listed on the (US) National Register of Historic Places (NRHP). The Dutch have a similar designation, Cultural Historic Monument, that has been applied to 16 ships from the same year (12 barges, 2 yachts, a tug and a fishing vessel).

CountryShipTypeBulgariaDrazkiDestroyerCanadaHelenaTugCanadaKeewatinOcean Liner

Finland Tarmo Icebreaker
Germany Andechs Ferry

Germany Hildegard Buoy Tender

Germany Steppke Tug Netherlands Antje Rebecca Yacht Netherlands Roeireddingboot No 15 Life Boat US Hercules Tug US Ambrose Lightship **NRHP** Pegasus Tug

NRHP F.C. Lewis Jr. Fishing Vessel

Those 11, vintage 1907 Museum Ships, form only 1.8% of the 631 Museum Ships (129 launched before 1911) established in 54 countries that are listed in Schedule A that updates Schedule 2 in Part II; there may still be some more that have not been located. The US leads with 218 (34.5%), while Canada has less than its traditional one-tenth of the US at 20.

Such exhibition ships are very much loved by the public; as far as attendance is concerned, the Vasa, a Swedish 1628 galleon, is the leader with over 1,300,000 visitors a year; a number, such as the Viking ships in Oslo, Portsmouth Historic Dockyard in the UK and several US warships, exceed 500,000. In view of this, many tourism specialists consider the appeal of an interesting old vessel or even a replica on a city waterfront to be sufficiently strong that every port should showcase one; visiting them assists in understanding life on-board in a bygone era.

The number of paying visitors (children under 16 are free) to the Keewatin has steadily increased, rising nearly 80% from about 7,000 in 2013 (the first full year at Port McNicoll) to around 12,500 in 2018, the season is the Victoria Day weekend to Thanksgiving. Before the Ship returned to Canada in June 2012, it had been docked at Saugatuck, Michigan from 1967 to 2012. At that location, attendance is believed not to have exceeded 5,000 visitors per year.

An important aspect is the distinction between a real Museum Ship, such as S.S. Keewatin, and a replica. When repairs accumulate, in some cases less and less of the vessel is authentic as the lack of old parts or appropriate tools may lead to the use of modern "short-cuts", for instance, welding rather than riveting. Visitors without a historical background should be able to distinguish between an original museum ship and a more or less historically relevant tourist attraction. The restoration of the S.S. Keewatin has managed to almost exclusively rely on traditional tools and methods, including, when necessary, hand-made replacement parts.

In addition to the United States, 16 countries have six or more Museum Ships. The most famous, from earlier times, after the Vasa, is HMS Victory, Nelson's flagship at the battle of Trafalgar in 1805. It is kept, together with Henry VIII's Mary Rose (1545), at Portsmouth Historic Dockyard in the UK.

VALUE – HULL & STRUCTURE

In reaching its Estimate of Fair Market Value of S.S. Keewatin, CVS relied to considerable degree on the conclusions of the other experienced specialists in the team. With respect to the Hull & Structure, we first, in late August 2017, commissioned an inspection report (survey) from North American Marine, Inc. of St. Catharines, ON (Appendix 2). Its conclusion was:

"As far as may be ascertained from a general examination of the vessel afloat, without making removals or opening up to expose parts ordinarily concealed or testing for tightness, it is the opinion of the undersigned that the vessel is structurally sound and is considered to be in excellent and serviceable condition for its intended use as a floating, maritime museum attraction in fresh water with appropriate maintenance for up to another 80 years."

The Foundation is ensuring the Ship gets proper maintenance. The following list 20 projects, completed in 2018 to the end of September, were supplied by the General Manager.

MANAGEMENT REPORT OF ALL PROJECTS COMPLETED ON S.S. KEEWATIN IN 2008

- 1. Storm Deck (Roof). Because of ice damage from an April storm and condition of the top deck of Keewatin, the entire deck had to be restored from steel shell up. The roof was ½ inch wood lay on a steel frame and covered with stiff but flexible matting. This matting was a weave of hemp and fabric from 1907. It was replaced with sheets of 1/8 inch marine-grade plywood, with all rotted boards replaced. Then it has been covered with a polyester fabric. In turn, this is covered with an acrylic "elastomeric" liquid rubber coating to a thickness of 28 mm. This treatment is specifically designed and formulated for large surface marine roof coverings; in all we have restored 1,200 square meters of area with 360 litres of this product.
- 2. <u>Ladies Lounge.</u> Replace all ceiling panels, repair wooden "under structure" and light fixtures, where needed, caulk and paint entire room. Install new wooden floor with appropriate wood to match all existing wood.
- 3. <u>Cargo Deck, retail store area</u>. Install ¾" plywood over raw steel hull with electrical outlets, prime and paint.
- 4. <u>Theatre.</u> Design, build and install mini theatre for handicapped visitors. Work includes all electrical, drapes and paint.
- 5. <u>Upgrade Cargo hold display area.</u> Scrape and paint floor and hull, where needed. Increase number of electrical plugs, spotlights and appropriate signs.
- 6. Build reading Library area.
- 7. Restoration of significant kitchen food preparation items: 1900's electric potato peeler, original Hobart mixer, meat slicer, juicer, mass toast oven.
- 8. Rebuild wheelhouse, recaulk windows, and replace interior doors with proper outside doors.

- 9. Rebuild all 4 sets of stairs on both Port and Starboard leading to wheelhouse. Stain and finish with 5 coats of varnish. Install rails to code, repair/replace all hardware.
- 10. Refinish the entire handrail surrounding the ship's Promenade deck, by sanding and applying 5 coats of varnish.
- 11. Prep, prime and repaint all hallways within passenger area of ship.
- 12. <u>Ballroom ceiling.</u> Complete repair/replace and refinish due to water damage from ice storm.
- 13. Restoring guest rooms for staging. Have completely renovated another 5 guest rooms and starboard rear hall leading to Engineering and steering engine.
- 14. <u>Windless Room (anchors).</u> Complete restoration and paint of the machine and the room including side hall and stairs to Cargo Deck.

Methodology Adopted

As there is no market for Museum Ships, it was necessary to adopt the Cost Approach. To this end, we engaged the US specialist firm Compass Maritime Services LLC of Teaneck NJ (Port of New York) to determine the Reproduction Cost New of the Keewatin. After extensive research described on pages 4 & 5 of their Original Desktop Valuation Report (Appendix 3), they decided to adopt the Cost-to-Capacity Method described in the Original Report.

This was applied by considering not only the suitable yards that could build the Ship, but also comparable vessels recently built or currently under construction; those selected are set out in Appendix No.1 to the Compass Report. From this information they developed pertinent valuation multiples, taking into account that in 1907 passengers expected somewhat less luxury than those in 2017 and that they would be on board for only three days rather than a week or more. Compass also considered the fact that the unit cost of a smaller ship is higher than for a larger one. The result was a figure in the US \$120 million range for the Reproduction Cost New.

Initially this required adjustment for the extra costs of the Ship's special features, such as a half inch rather than three-eights inch plate hull, being riveted not welded and, in order to fit through the previous Welland Canal, the ability to be divided into two sections in Quebec City and then reassembled in Buffalo.

Finally, reductions were made in the value for certain excluded items, such as the boilers and quadruple expansion steam engine (page 14 of their original report, Appendix 3), to arrive at a final Reproduction Cost New of US \$85 million as at November 8, 2017 (the date of Tom Roberts' visit). Converted to Canadian funds at the exchange rate of that date (US \$1.00 equals \$1.2905), the amount becomes \$108,200,000 (rounded).

Conclusion

Schedule C sets out their updated Desktop Valuation Certificate stating an unchanged value of Eighty-five Million United States Dollars (US\$85,000,000) as of September 20, 2018. Converted to Canadian funds at the exchange rate on that date (US\$1.00 equals \$1.2905) it is \$102,692,500.

To turn this figure into a current Fair Market Value, deductions must be made for depreciation. For the Hull & Structure, three types of depreciation were considered: Physical Deterioration due to wear and tear; Functional Obsolescence due to the Ship's inability to operate as a passenger liner: and Technological Obsolescence as she operated on coal-generated steam power rather than the current diesel engines.

In our view, a time allocation is suitable to adjust for the Physical Deterioration. Based on Ian Cameron's Report of Inspection (Appendix 2-Part II) the remaining useful life was 80 years in 2017. This would a current reduction of 58.4% (111 years elapsed divided by a total life of 190 years [111 years elapsed + 79 years to come]).

With respect to Functional Obsolescence, the deduction has to reflect alternative uses for the Keewatin from being a passenger liner, such as the Museum Ship she has been for the last 50 years and will be for the remainder of her 190-year career. With passenger service (1908-1967) taking up only 30% (57 years divided by 190) of the Ship's life, we have deducted 15% (half that amount) as a suitable provision.

As far as technological obsolescence is concerned, in our view, not only is no deduction required, but with one of only three functioning quadruple expansion nautical steam engines in the world, the other two powering the rebuilt yacht Delphine (see Part II), the Keewatin deserves a premium.

These adjustments result in a Fair Market Value of \$38,750,000 for the Hull & Structure as shown in the table on the next page.

Fair Market Value Keewatin Hull & Strusture

		\mathbf{U}_{i}	S\$		\$
Reproduction Cost New	85,000,000			109,692,500	
Exchange Rate	September 20, 201		US\$=	1.2905	
Physical Deterioration					
Current Life	111	Years		58.4%	
Remaining Useful Life	<u>79</u>	Years		41.6%	
Estimated Total Life	<u>190</u>	Years		100.0%	
Physical Deterioration Factor				58.4%	(64,083,513)
Depreciated Reproduction Cost Hull & Structure					45,608,987
Funcional Obsolesance as Passenger Ship				15.0%	(6,841,348)
Fair Market Value Hull & Structure					38,767,639
Rounded					38,750,000

VALUE - MACHINERY, EQUIPMENT & RELATED ASSETS

With respect to the Machinery, Equipment & Related Assets, which cover every item relating to the Ship not included by Compass, CVS engaged Gilles R. Moss an experienced Canadian appraiser of Machinery & Equipment.

His report (Schedule C) deals with over 600 articles of which five represent 74% as shown in the table below:

Major Items of Equipment on S S Keewatin

		Value	
	Item	\$	
a)	Quadruple Expansion Steam Engine	3,115,000	61.9%
b)	Scotch Type Boilers	318,000	6.3%
c)	Double Chain Anchor Windlas	116,000	2.3%
d)	Stearing Gear Engine	98,000	1.9%
e)	Ship Propeller	65,000	1.3%
	Total for Group	3,712,000	73.8%
	All Other Items	1,318,000	26.2%
	Total for all items	5,030,000	100.0%

VALUE – DISPLAYS & ACCESSORIES

Although representing less than 1% of the aggregate Fair Market Value, the large number of small value Displays & Accessories (artifacts), although individually of small values, are essential to the success of the S.S. Keewatin as a Museum Ship. Through her private company, Belleholme Management Inc., Ms. Brown valued them at \$315,000 in total, as follows:

	\$
Clothing & Accessories	10,484
Barber's Shop & Souvenirs	3,650
Luggage & Cameras	4,420
Artwork	10,075
Displays	3,990
Linens & Blankets	18,250
Furniture & Office Equipment	50,290
Clocks & Decorative Items	25,000
Flatware, Dinnerware & Utensils	61,253
Carpets	9,450
Uniforms	4,105
Ephemera	12,830
Model Boats	103,850
Total	<u>317,647</u>
Rounded	<u>315,000</u>

After revisiting the Ship and reviewing her work Ms. Brown confirmed her previous values in a letter (Schedule D).

REASONED JUSTIFICATION

CVS realizes that a modern replica of the S.S. Keewatin would be totally different from the original, but there is not and cannot ever be a market for museums or Museum Ships, as each is an individual collection of numerous examples from the past. In this case, the Ship is a unique, extremely well-preserved set that is in effect a complete unit. Therefore, to establish the Fair Market Value of the Hull & Structure as well as for certain items of Machinery, Equipment & Related Assets, CVS had to rely on the Cost Approach. According to Gowrie Group, a specialized firm in Westbrook, CT, that insures historic naval ships, one basis for determining insurance value is Reproduction Cost New.

During its lifetime, the Ship underwent a number of upgrades, such as a complete set of new furniture from the T. Eaton Company in 1953. When she was decommissioned, much of the original furnishings were sold off, with numerous items being purchased by Port McNicoll residents. Since the Ship's return to Canada in 2012, many of those goods have either been donated back or acquired by Skyline.

The interior is now virtually completely restored to her condition in 1965, the last year of commercial operation. To enhance a visitor's experience, many cabins have been furnished with artifacts from one of the 57 years of the Ship's active life (1908-1965) and there are numerous pertinent displays on the main deck. These "Displays & Accessories", while less than 1% of the aggregate Fair Market Value, are an important feature much admired, especially by young visitors.

While the hull was built in Scotland in 1907, the Ship was fitted out in Owen Sound, Ontario, during 1908, by the finest Canadian craftsmen then available to the CPR and is the only surviving example of their marine work. It is not the product of a single artist but of many artisans. It remains totally authentic, adhering to its original lay-out with no significant changes; as mentioned above, she is now almost fully restored to her 1965 condition. Today the Keewatin, unlike any replica, is complete in every respect except for the stern anchor that remains in Michigan; the bow remains with the Ship.

Even though there is no apparent market for Museum Ships, they have significant value as they draw tourists, in some cases, as discussed under MUSEUM SHIPS, substantial crowds. The Keewatin has the proven potential to do so, as it is not only important to Canadians and Canada, but an example of maritime history on a world-wide basis. As there is no way of practically applying any other methods CVS, using both the Market and Cost Approaches, has developed the amount of \$48,750,000 as its Estimate of Fair Market Value. This is a slight increase from the \$48,300,00 of November 2017.

That figure is supported by the offering for sale in 2015 of the only possible comparison CVS could find, the 1921 steam yacht "Delphine". Commissioned by the auto magnate Horace Dodge, that vessel has two quadruple expansion steam engines designed by him and was completed after his death. Delphine is rather smaller than the Keewatin (79m rather than 107m long and 1,950 gross tons rather 3,856) but more luxurious and 14 years younger. Using a factor of 1.66 to adjust for the greater size, the EURO 19,700,000 asking price (reduced from € 38 million) is equivalent to \$48,790,000, converted at EURO 1.00=\$1.492, the exchange rate at October 5, 2018.

Further support to the value of the Hull & Structure is given by the Trending Method previously discussed. The original charge in 1907 by Fairfield's for both the Keewatin and its sister ship the Assiniboia was £ 159,140 or £ 79,572 for the Ship. This, according to Measuring Worth was equivalent to a 2017 equivalent cost of £73,740,000 (\$122,700,000 converted at £1.00 = \$1.6638), This expenditure is only estimated to be only about 80% of the Ships total cost, as it does not include the fitting out by the CPR in Canada, nor any subsequent improvements. Based on this, the total cost in 2017 Canadian dollars, would be approximately \$153,375,000; this method confirms that Compass's US\$120 million (\$152,750,000) is a reasonable base figure for Reproduction Cost New, as the two amounts are within 0.5% of each other.

Museum Ship Premium

As discussed previously, under Technological Obsolescence, the Keewatin is a unique, functioning example of an Edwardian ocean liner, effectively preserved in a time capsule for 50 years. In its present state, even though there is no market for Museum Ships, a conversation with our related firm in China indicated that a possible buyer for the Ship could likely be found in that country. Such a purchaser would need to pay a buyer's premium. Auction houses typically charge 15% but for larger transactions (over US\$ 25 million -\$31,00,000) reduce the rate to 10%. In our view such a premium is appropriate in determining the Fair Market Value of a Museum Ship and we have included it in our \$48,750,000 Estimate of Fair Market Value.

CONCLUSION OF VALUE

Based on the information and documents reviewed, the explanations received and research undertaken as set out in Schedules c and Appendices 2 to 5 of Part II, and subject to the Assumptions, Restrictions and Qualifications listed in this Valuation Report, our Estimate of Fair Market Value, as at September 2018, of Museum Ship S.S. Keewatin, for the stated purpose, is FORTY-EIGHT MILLION SEVEN HUNDRED AND FIFTY THOUSAND DOLLARS (\$48,750,000) made up as follows:

Fair Market Value S.S. Keewatin With Museum Ship Premium

		\$
Fair Market Value Hull & Structure		38,750,000
Fair Market Value Machinery, Equipment & and Related Assets		5,030,000
Fair Market Value Ship		43,780,000
Museum Ship Premium	10%	4,378,000
Fair Market Value Museum		48,158,000
Fair Market Value Displays & Accessories		315,000
Agragate Fair Market Vlue		48,473,000
Agragate Fair Market Vlue - Rounded		48,475,000

DOCUMENTS USED

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- Book: "S.S. Keewatin 1907, Port McNicoll, Ontario, Canada the Last Edwardian Passenger Steamship in the World!, The Great Lakes Queen by Kim Patricia Vaillancourt"
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- 33. List of Artifacts Donated to the care of Huronia Museum by Friends of Keewatin in 2014
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RESTRICTIONS AND QUALIFICATIONS

This Valuation Report is issued subject to the following Restrictions and Qualifications:

- CVS reserves the right, but is under no obligation, to revise this Valuation Report if any information, trends or changed conditions affecting our conclusions, that were in existence before the Valuation Date, become known to us after its issue; however, we have no responsibility to update our Valuation Report as a result of subsequent events.
- This document is not intended for general circulation or publication; any use or reproduction of it for any purpose other than that stated is prohibited without our specific written permission, unless ordered by a court of competent jurisdiction.
- CVS hereby disclaims all liability to any party other than the Town, with such liability restricted to negligence on our part; in particular, we deny all responsibility or liability for any losses occasioned to the Town or any other party, resulting from unauthorized circulation, publication, reproduction or use of this Valuation Report.
- Neither its authors nor CVS intend that this Valuation Report make any representations, nor be liable for any representations considered to be contained in it, expressed or implied, or for any omissions from it.
- The analyses and research used in this Valuation Report were carried out by CVS and
 other professionals as independent and neutral experts; no party has put any restrictions
 on the scope of our work, opinions or conclusions.
- CVS assumes that information and documents received from Skyline are complete, true
 and correct in all material respects. We did not conduct an Audit or Review of the
 financial affairs of the Ship. No external verification was obtained of the accuracy or
 completeness of any of the documents used. However, CVS carefully examined them,
 and, while we cannot express an opinion on them, we consider them to be reliable.
- The preparation of a valuation is a complex process, involving analyses of diverse but interrelated data that must be regarded in their entirety. Therefore, CVS insists that the analyses and related conclusions expressed in this Valuation Report must be considered as a whole, and that it is not appropriate to select or extract any particular factor or portion from it without giving weight to all the components and analyses that went into its formulation; to do so would place undue emphasis on any particular aspect and could result in erroneous conclusions. A Letter of Representation with respect to the accuracy and completeness of the information supplied has been obtained from Skyline.

BASIC ASSUMPTIONS

This Estimate of Fair Market Value makes the following specific assumptions:

- All information supplied by Skyline or the Ship is complete, true and correct.
- Skyline has informed us of all significant factors, contracts or agreements relating to the Ship, in effect at the Valuation Date, that have a bearing on its value and they are reflected in this Valuation Report.
- At the Valuation Date, no contracts or agreements were being negotiated that would have a material effect on the value of the Ship.
- All required licenses, permits, consents, or other legislative or administrative
 authorizations from any government or private entity had been obtained by Skyline; they
 were in force at the Valuation Date, remain in force at the date of this Valuation Report,
 and will be kept current as required.
- No material adverse changes have taken place in the operations of the Ship between the Valuation Date and the date of this Valuation Report.
- There were no contracts, arrangements or agreements in force at the Valuation Date that would have any effect on the value of the Ship.
- Considering the purpose of this Valuation Report, no investigation was necessary into potential economies of scale, cost savings or other synergies, that might be achieved by a sale of the Ship to a "special purchaser". Nor was any attempt made to identify any entity who might pay a premium to buy it for any particular reason.
- All litigation, current, pending or threatened, if any, against the Ship has been disclosed to CVS.

CERTIFICATE

I, James P. Catty, certify that, to the best of my knowledge and belief:

- The statements of fact contained in this Valuation Report are true and correct.
- The reported analyses, opinions and conclusions are limited only by the indicated Assumptions, Restrictions and Qualifications and are my personal, unbiased professional analyses, opinions and conclusions.
- I have no direct or indirect, present or prospective interest in Skyline or the Town; I have no personal interest or bias with respect to the parties involved and was subject to no limitations imposed by any party.
- Our compensation is not contingent on any action or event resulting from analyses, opinions or conclusions in, or the use of this Valuation Report.
- My analyses, opinions and conclusions were developed, and this Valuation Report has been prepared in conformity with, the Standards of the Canadian Institute of Chartered Business Valuators and the US Uniform Standards of Professional Appraisal Practice.
- I received significant professional assistance in preparing this Valuation Report from: Ian Cameron, Tom Roberts, Gilles Moss and Valerie Brown whose CVs are in Appendix 6 of Part II.

5 October 2018

Toronto, Canada

Corporate Valuation Services Limited

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Per

James P. Catty, MA, ICVS, CPA•CA (Canada), CBV, CPA/ABV (US), CFA, CGMA, CFE President

Schedule A – Museum Ships

Country	Launch	Ship	Туре
Argentina	1874	ARA Uruguay	Corvette
Argentina	1899	ARA Presidente Sarmiento	Frigate
Argentina	1934	Lehg II	Ketch
Argentina	1944	ARA Irigoyen	Fleet Tug
Australia	1948	Yelta	Tugboat
Australia	1962	Cape Don	Lighthouse tender
Australia	1864	City of Adelaide	Clipper
Australia	1867	May Queen	Ketch
Australia	1874	James Craig	Barque
Australia	1883	MV Nelcebee	Auxiliary Schooner
Australia	1885	Polly Woodside	Barque
Australia	1912	MV Lady Denman	Ferry
Australia	1917	Carpentaria	Lightvessel
Australia	1925	SS Forceful	Tugboat
Australia	1933	Wattle	Tugboat
Australia	1934	MV Krait	Trawler
Australia	1941	HMAS Castlemaine	Corvette
Australia	1941	HMAS Whyalla	Minesweeper
Australia	1944	HMAS Diamantina	Frigate
Australia	1945	Fearless	Tugboat
Australia	1956	HMAS Vampire	Destroyer
Australia	1966	HMAS Otway	Submarine
Australia	1967	HMAS Advance	Patrol boat
Australia	1967	HMAS Ovens	Submarine
Australia	1968	HMAS Onslow	Submarine
Australia	1973	HMAS Otama	Submarine
Australia	1981	HMAS Townsville	Patrol boat
Australia	1984	HMAS Gladstone	Patrol boat
Austria	1969	Niederösterreich	Patrol Boat
Belgium	1914	Amical	Tugboat
Belgium	1932	Mercator	Barquentine
Belgium	1959	Oudenaarde	Minesweeper
Belgium		B-143	Submarine
Brazil		Laurindo Pitta	Salvage tug
Brazil	1943	Comandante Bauru	Destroyer escort
Brazil	1975	Riachuelo	Submarine
Bulgaria		Radetzky	Steamship
Bulgaria	1907	Drazki	Torpedo boat

Country Launch Ship Type

Brazil 1910 Laurindo Pitta Salvage tug
Brazil 1943 Comandante Bauru Destroyer escort

Brazil 1975 Riachuelo Submarine
Bulgaria 1851 Radetzky Steamship
Bulgaria 1907 Drazki Torpedo boat
Canada 1897 SS *Keenora* Steamboat
Canada 1898 Moyie Sternwheeler

Canada1902 MS NormacFerryCanada1906 James WhalenTugboat

Canada 1907 SS Keewatin Passenger ship

Canada 1913 CSS Acadia Hydrographic Research shi

Canada 1914 SS Naramata Tugboat
Canada 1914 SS Sicamous Sternwheeler

Canada 1915 CCGS Bradbury Fisheries patrol vessel

1922 SS Keno Canada Sternwheeler 1928 RCMPV St Roch Canada Schooner Canada 1937 Radium King **Tugboat** Canada 1937 SS Klondike Sternwheeler 1940 CCGS Ernest Lapointe Canada **Icebreaker** 1941 HMCS Sackville Canada Corvette

Canada1942 Chickama IIPassenger shipCanada1942 HMCS HaidaDestroyerCanada1943 Ned HanlanTugboatCanada1944 Lady CanadianFishing vessel

Canada 1946 SS Norisle **Ferry** Canada 1950 MS Norgoma **Ferry** Canada 1955 Peguis II **Tugboat** Canada 1958 CCGS Alexander Henry **Icebreaker Freighter** Canada 1963 Joe Simpson Canada 1964 HMCS Ojibwa **Submarine** Canada 1965 HMCS Onondaga **Submarine** Canada 1965 Persephone tugboat Canada 1966 RV Ben Franklin **Submersible** Canada 1968 HMCS Bras d'Or Hydrofoil

Chile 1865 Huáscar Monitor warship

Chile 1911 RAM Poderoso Tug Chile 1925 Contramaestre Micalvi **Freighter** Chile 1964 Fresia (PTF-81) Torpedo boat Chile 1972 O'Brien **Submarine** China Gunboat 1913 SS Zhongshan China 1940 Chi Lin (103) **Destroyer**

CountryLaunchShipTypeChina1941 AnshanDestroyer

China 1944 USS LST-1008 Landing Ship, Tank

China 1953 Sir Alexander Grantham Fireboat

China 1954 Brasil Maru Passenger ship
China 1962 Minghua Ocean liner
China 1966 PLAN Nanchong 502 Frigate

China 1970 Long March 1 (401) Nuclear submarine

China 1971 PLAN Yintang 531 Frigate

China1972 KievAircraft carrierChina1975 MinskAircraft carrier

China 1975 PLAN Xiamen 515 Frigate
Croatia 1894 Vridni Tugboat

Croatia **1938** Galeb Presidential yacht 1944 Mališan (CB 20) Midget submarine Croatia Cuba 1943 Granma Cabin cruiser **Denmark** 1860 Jylland **Screw frigate Denmark** 1895 Gedser Rev (XVII) Lightvessel **Denmark** 1941 Askø Minesweeper **Denmark** 1963 HDMS Springeren (S324) **Submarine Denmark** 1965 HDMS Peder Skram **Frigate Denmark** 1965 HDMS Sælen **Submarine**

Denmark1965 HDMS SøbjørnenMotor Torpedo BoatDenmark1977 HDMS Sehested (P547)Fast Attack Craft

Ecuador 1884 BAE Abdón Calderón Naval ship 2500 BC Khufu ship **Egypt** Solar barge **Estonia** 1914 Suur Tõll **Icebreaker Estonia** 1936 EML Lembit **Submarine Estonia** 1943 EML Valvas **Buoy tender** Estonia 1956 Admiral **Steamship** Estonia 1956 EML Suurop Patrol boat **Estonia** 1966 EML Kalev Minesweeper **Estonia** 1966 PVL Torm Patrol boat Estonia 1976 EML Grif Patrol boat **Finland** 1874 Salama Steamship **Finland** 1887 Sigyn **Barque**

Finland 1902 Suomen Joutsen Full rigged ship

Finland1903 PommernBarqueFinland1907 TarmoIcebreakerFinland1915 Wilhelm CarpelanTransport boatFinland1933 VesikkoSubmarineFinland1935 VMV-11Patrol boat

Country Launch Ship Type

Finland1943 TyrskyTorpedo boatFinland1957 KeihässalmiMinelayerFinland1960 MS BoreCruise shipFinland1968 FNS KarjalaCorvette

France 1901 Duchesse Anne Full rigged ship
France 1904 Alose Submarine
France 1927 Princess Elizabeth Paddle steamer
France 1944 ST-488 Small harbor tug
France 1953 FNRS III Bathyscaphe

France 1956 Colbert Guided missile cruiser

France 1957 Argonaute **Submarine** 1957 Maillé-Brézé (D627) **France Destroyer** France 1958 France I Weather ship 1960 Espadon (S637) **Submarine France France** 1962 Joshua Ketch **France 1964 Flore Submarine France** 1965 Entreprenant **Tugboat** France 1971 Redoutable **Submarine** 1850 Brandtaucher **Submarine** Germany 1888 Elbe 3 Germany Lightvessel Germany 1896 Rickmer Rickmers **Barque**

Germany 1906 SM U-1 Submarine
Germany 1908 Bürgermeister Abendroth (Elbe 3) Lightvessel
Germany 1911 Passat Barque
Germany 1911 Peking Barque

Germany 1927 Deutschland Full rigged ship

1933 Gorch Fock **Barque** Germany 1933 Stettin **Icebreaker** Germany Germany 1933 Stralsund Train ferry 1939 Rau IX Whaler Germany Germany 1943 U-995 Submarine 1945 Wilhelm Bauer (U-2540) Germany **Submarine** 1951 Charlesville **Ocean Liner** Germany 1957 Frieden Cargo ship Germany Germany 1958 MS Bleichen **Freighter** 1958 Weilheim M1077 Minesweeper Germany 1959 Kranich P6083 **Fast Attack Craft** Germany

Germany 1961 MS Cap San Diego Freighter
Germany 1962 K-24 Submarine
Germany 1962 U-461 Submarine
Germany 1964 Stubnitz Factory ship

Germany 1967 Mölders Guided missile destroyer

Country Launch Ship **Type** 1967 U-10 **Submarine** Germany Germany 1967 U-9 **Submarine** 1968 U-11 **Submarine** Germany Germany 1973 HMS Otus **Submarine** 1976 B-515 **Submarine** Germany 1986 Hans Beimler **Missile Corvette** Germany 1908 Thalis o Milisios Greece Cable layer Greece 1910 Georgios Averof **Armored cruiser** Greece 1942 HNS Velos **Destroyer** Greece 1943 SS Hellas Liberty Cargo ship 1871 SMS Leitha Monitor Hungary **Iceland** 1955 Magni **Tugboat**

Iceland 1959 ICGV Óðinn Offshore patrol vessel India 1961 INS Vikrabt **Aircraft Carrier** India 1969 INS Kunsura Submarine India 1974 INS Vagli **Submarine** India 1976 INS Chamak Missile boat 1976 INS Chapal India Missile boat 1977 INS Chatak India Missile boat Indonesia 1952 KRI Pasopati (410) **Submarine**

Israel 1942 INS Af Al Pi Chen Landing craft tank

Israel1967 INS MivtachMissile boatIsrael1970 INS DaburPatrol boatIsrael1975 INS GalSubmarineItaly1895 Pietro MiccaTugboat

Italy 1898 Puglia Protected cruiser 1916 MAS-15 Torpedo boat Italy Italy 1916 MAS-96 Torpedo boat **Italy** 1921 Ebe **Barquentine** 1967 Enrico Dandolo (S513) **Submarine** Italy Italy 1968 Enrico Toti (S506) **Submarine Italy 1976 Nazario Sauro (S 518) Submarine**

Japan1900 MikasaPre-dreadnoughtJapan1929 Hikawa MaruOcean LinerJapan1930 Kaiwo MaruSail Training shipJapan1930 Nippon MaruSail Training ship

Japan1938 SōyaIcebreakerJapan1985 AkishioSubmarineMalaysia1967 KD RahmatFrigateMalaysia1978 Ouessant (S623)Submarine

Country Launch Ship **Type** 1967 Heroj (P-821) **Submarine** Montenegro

Montenegro 1986 Una (P-912) Midget submarine

Frigate Myanmar 1942 UBS Mavu **Netherlands** 1868 HNLMS Buffel Ram **Netherlands** 1868 HNLMS Schorpioen Ram ship **Netherlands** 1877 HNLMS Bonaire **Frigate Netherlands** 1900 Christiaan Brunings **Icebreaker**

Netherlands Torpedo recovery vessel 1933 HMS Elfin

Netherlands 1936 HNLMS Abraham Crijnssen Minesweeper **Netherlands** 1939 Hudson **Tugboat** 1950 MLV Castor **Netherlands** Pilot vessel **Netherlands** 1951 Holland **Tugboat Netherlands** 1953 HNLMS Mercuur Minesweeper **Netherlands** 1953 Le Fougueux P641 Submarine chaser **Netherlands 1954 Bernisse (AMS 60)** Minesweeper **Netherlands** 1957 B-80 **Submarine Netherlands** 1958 SS Rotterdam **Ocean Liner Netherlands** 1959 Elbe Oceangoing tug **Netherlands** 1965 HNLMS Tonijn **Submarine** 1974 HNLMS De Ruyter **Netherlands Frigate 148 De Meern 1 Barge**

Netherlands New Zealand 1853 Edwin Fox **Barque** New Zealand

1925 Rapaki

North Korea 1944 USS Pueblo Technical research ship

Crane vessel

1866 SS Bjoren Norway Steamboat **Norway** 1872 Gjøa Sloop

1873 HNoMS Rap Norway Torpedo boat 1892 Fram Research ship **Norway** Norway 1911 DS Hestmanden Cargo ship **1937 MV Heland (M5V)** Fishing boat Norway **Norway** 1939 MV Vita (H95B) Shetland bus 1942 HNoMS Hitra **Norway Submarine chaser Norway** 1950 Southern Actor Whale catcher 1953 HNoMS Alta Minesweeper Norway

Norway 1956 MS Finnmarken Coastal trading vessel

1965 HNoMS Narvik **Frigate Norway** 1965 HnoMS Utstein **Submarine** Norway **Norway** 1965 HNoMS Blink Patrol boat

Norway 1965 KNM Skrei Motor torpedo boat **Pakistan** 1956 PNS Mujahid **Coastal minesweeper**

Pakistan 1968 PNS Hangor Submarine 1931 ARP Humaitá Gunboat **Paraguay**

Country Launch Ship **Type** 1861 Yavari Peru **Steamship** Peru 1904 BAP America Gunboat 1954 BAP Abtao Peru Submarine **Poland** 1909 Dar Pomorza Full rigged ship **Poland** 1932 ORP Batory Patrol boat **Poland** 1936 ORP Błyskawica **Destroyer** 1949 SS Soldek **Poland Freighter Poland** 1965 ORP Fala Patrol craft **Portugal** 1778 Bergantim Real Barge **Portugal** 1843 Dom Fernando II e Glória **Frigate** 1955 Gil Eannes **Portugal Hospital ship** 1967 NRP Albacora **Portugal Submarine Portugal** 1968 NRP Barracuda Submarine

Russia 1900 Aurora Protected cruiser

Icebreaker

1900 Angara

Russia 1917 Krasin Icebreaker
Russia 1929 Narodovolets (D-2) Submarine
Russia 1938 K-21 Submarine
Russia 1939 Vityaz Research vessel

1952 Mikhail Kutuzov Cruiser Russia Russia 1954 S-189 Submarine Russia 1952 M-261 **Submarine 1957** Lenin Russia **Icebreaker** 1968 B-413 Russia **Submarine** Russia 1968 Kosmonavt Viktor Patsayev Research Vessel **Submarine** Russia 1971 B-440 Russia 1977 B-307 Submarine Russia 1980 B-396 **Submarine**

Serbia1985 Tisa (P-911)Midget submarineSlovenia1987 Zeta (P-913)Midget submarine

South Africa 1927 Ulundi Steam tug

South Africa 1941 SAS Somerset Boom defense vessel

South Africa1957 SAS DurbanMinesweeperSouth Africa1961 J.R. MoreSteam tugSouth Africa1972 SAS AssegaaiSubmarineSouth Korea1943 ROKS TaedongFrigate

South Korea1944 ROKS SuyeongLanding Ship, TankSouth Korea1944 Wi BongLanding Ship, TankSouth Korea1945 ROKS Hwa SanLanding Ship, Tank

South Korea 1945 ROKS Jeong Buk Destroyer South Korea 1945 ROKS Kang Won Destroyer

Russia

South Korea 1980 ROKS Ulsan **Frigate** South Korea 1982 ROKS Dolgorae (SSM-051) **Submarine** 1984 ROKS Seoul South Korea Frigate South Korea 1989 ROKS Cheonan Corvette South Korea 1991 Sang-O class submarine **Submarine South Korea** 1970s ROKS PKM-285 Patrol boat 1970s ROKS PKM-357 South Korea Patrol boat **Spain 1887 Peral Submarine Spain** 1912 SS La Palma Steamship **Spain** 1957 Tiburón-I SA-51 **Submarine** 1957 Tiburón-II SA-52 **Submarine Spain Spain** 1973 Delfin (S-61) **Submarine** Suriname 1910 Suriname-Rivier Lightvessel Sweden 1628 Vasa Galleon Sweden **1875 Sölve** Monitor Sweden 1888 af Chapman Full rigged ship Sweden 1897 HMS Najaden Full rigged ship Sweden 1900 Jarramas Tall ship Sweden 1903 Finngrundet Lightvessel Sweden 1904 Hajen **Submarine** Sweden 1908 Stormprincess **Tugboat** Sweden 1915 Fladen Lightvessel 1915 SS Sankt Erik Sweden **Icebreaker 1920 ESAB IV** Sweden Repair ship Sweden 1929 SS Orion Pilot ship Sweden 1931 Flodsprutan II **Fireboat** Sweden 1938 Fryken Coastal trading vessel Sweden 1939 Herkules **Tugboat** Sweden 1940 HMS Bremön (M55) Minesweeper Sweden 1942 HMS U3 **Submarine** Sweden 1953 HSwMS Kalmarsund **Minelayer** 1956 HMS Småland Sweden **Destroyer** Sweden 1962 HSwMS Nordkaparen **Submarine** Sweden 1963 Dan Broström Port ferry Sweden 1966 HMS Spica Torpedo boat Sweden 1978 HSwMS Hugin Patrol boat **Switzerland** 1964 Auguste Piccard **Submarine**

1945 ROCS Te Yang

1943 HTMS Prasae

1943 HTMS Tachin

1936 HTMS Maeklong

Ship

Type

Destroyer

Corvette

Frigate

Frigate

Taiwan

Thailand

Thailand

Thailand

Country

Launch

Country Launch Ship **Type Turkey** 1915 Nusret Minelaver **Turkey** 1944 TCG Uluçalireis **Submarine** 1946 TCG Gavret **Turkey Destroyer Turkey** 1951 TCG Pirireis **Submarine Turkey 1972 TCG Ege Frigate** Ukraine 1950s M-305 **Submarine United Kingdom** 1509 Mary Rose Carrack

United Kingdom 1765 HMS Victory Ship of the line

United Kingdom

1817 HMS Trincomalee

United Kingdom

1824 HMS Unicorn

Frigate

United Kingdom

1843 SS Great Britain

United Kingdom

1860 HMS Warrior

Armored Frigate

United Kingdom 1861 Mayflower tugboat
United Kingdom 1869 Cutty Sark Clipper
United Kingdom 1872 Glenlee Barque
United Kingdom 1878 HMS Gannet Sloop

United Kingdom 1890 SS Robin Coastal trading vessel

United Kingdom 1894 RNLB Alfred Corry (ON 353) Lifeboat
United Kingdom 1894 Turbinia Steamship
United Kingdom 1901 HMS Holland 1 Submarine
United Kingdom 1901 Reaper Fifie

1901 RRS Discovery **United Kingdom Barque United Kingdom** 1903 Daniel Adamson **Tender United Kingdom** 1903 Garlandstone Ketch **United Kingdom** 1909 Olga **Pilot Cutter United Kingdom** 1910 Arctic Penguin Lightvessel **United Kingdom** 1911 SS Nomadic **Tender United Kingdom** 1912 James Caird Whaleboat **United Kingdom** 1912 Sundowner Motor yacht **United Kingdom** 1914 Calshot Spit (LV78) Lightvessel **United Kingdom** 1914 HMS Caroline Cruiser **United Kingdom** 1915 HMS M33 Monitor

United Kingdom 1916 HM CMB 4 Coastal Motor Boat

United Kingdom 1917 De Wadden Schooner 1918 HMS President **United Kingdom** Sloop **United Kingdom** 1924 Knocker White **Tugboat United Kingdom** 1924 PS Medway Queen **Steamship United Kingdom** 1927 Portway **Tugboat** 1927 Spurn Lightship **United Kingdom** Lightvessel **United Kingdom** 1929 TSS T/T Calshot Tug tender CountryLaunchShipTypeUnited Kingdom1914 HMS CarolineCruiserUnited Kingdom1915 HMS M33Monitor

United Kingdom 1916 HM CMB 4 Coastal Motor Boat

United Kingdom 1917 De Wadden Schooner **United Kingdom** 1918 HMS President Sloop **United Kingdom** 1924 Knocker White **Tugboat United Kingdom** 1924 PS Medway Queen **Steamship Tugboat United Kingdom** 1927 Portway **United Kingdom** 1927 Spurn Lightship Lightvessel **United Kingdom** 1929 TSS T/T Calshot Tug tender **United Kingdom Drifter** 1930 Lvdia Eva 1931 John H Amos **United Kingdom** tugboat **United Kingdom** 1933 RNLB Thomas McCunn Lifeboat

United Kingdom 1933 TS Queen Mary Clyde steamer United Kingdom 1934 PS Wingfield Castle Paddle steamer

United Kingdom 1934 Pyronaut **Fireboat United Kingdom** 1935 John King tugboat **United Kingdom** 1935 Massey Shaw **Fireboat United Kingdom 1937 Helwick LV91** Lightvessel 1937 Tamzine **United Kingdom** Fishing boat **United Kingdom** 1938 HMS Belfast Light cruiser **United Kingdom** 1939 RNLB Jesse Lumb Lifeboat 1940 RNLB Lucy Lavers **United Kingdom** Lifeboat **United Kingdom** 1942 Spartan Clyde puffer **United Kingdom** 1942 U-534 **Submarine United Kingdom** 1943 Auld Reekie Clyde puffer **United Kingdom** 1943 HMS Cavalier **Destroyer United Kingdom** 1943 HMS Medusa (ML1387) Patrol boat **United Kingdom** 1943 S-130 Fast attack craft **United Kingdom** 1944 Biber 105 **Submarine United Kingdom** 1944 Biber 90 Submarine 1944 HMS X24 **United Kingdom Submarine** 1944 Vital Spark **United Kingdom** Clyde puffer

United Kingdom 1945 Cervia Tug

United Kingdom 1945 HMS Expunger (XE8) Submarine

United Kingdom 1945 HMS LCT (3) 7074 Landing craft tank

United Kingdom 1945 HMS Alliance Submarine
United Kingdom 1946 VIC 56 Clyde Puffer
United Kingdom 1951 HMS Bronington Minesweeper

Country Launch Ship **Type United Kingdom** 1952 MB Fountain **Bunkering vessel United Kingdom** 1952 HMS Gay Archer Patrol boat **United Kingdom** 1952 USN P22 Patrol boat **United Kingdom** 1953 Edmund Gardner Pilot boat **United Kingdom** 1953 HMY Britannia **Royal Yacht United Kingdom** 1953 PS Maid of the Loch Paddle steamer **United Kingdom** 1954 Canning Tug 1954 HMS Stickleback (X51) **Submarine United Kingdom United Kingdom** 1955 Shieldhall Steamship **United Kingdom** 1955 SS Explorer Research vessel **United Kingdom** 1956 Garnock **Tugboat United Kingdom** 1957 Ross Tiger Fishing trawler **United Kingdom** 1960 Arctic Corsair **Trawler United Kingdom** 1962 Gipsy Moth IV **Yacht United Kingdom** 1962 HMS Ocelot **Submarine United Kingdom** 1963 LV21 Lightvessel **United Kingdom** 1964 Brocklebank Tug **United Kingdom** 1966 B-49 **Submarine** 1970 HMS Courageous **United Kingdom** Submarine **United Kingdom** 1972 HMS Wilton Minesweeper **United Kingdom** 1972 Jacinta **Trawler** Submersible **United Kingdom** 1982 LR 3 **United States** 1776 USS Philadelphia Gunboat **United States** 1797 USS Constitution **Frigate United States** 1813 USS Niagara **Snow-brig United States** 1841 Charles W. Morgan Whaler **United States 1854 USS Constellation** Sloop Submarine **United States** 1861 Bayou St. John **United States** 1862 Australia **Coasting schooner United States** 1862 USS Cairo Gunboat **United States** 1863 H. L. Hunley **Submarine United States** 1863 Intelligent Whale **Submarine United States** 1863 Star of India **Barque United States** 1866 Emma C. Berry Sloop **United States** 1877 Elissa **Barque United States** 1878 Falls of Clyde Full rigged ship **United States 1880** Annie Sandbagger sloop **United States** 1881 Fenian Ram **Submarine United States** 1882 Joseph Conrad Sailing ship **United States** 1883 Christeen Oyster sloop

1885 Coronet

United States

Yacht

Country Launch Ship **Type United States** 1885 Pioneer Schooner **United States** 1885 Wavertree **Full-rigged ship** Full rigged ship **United States** 1886 Balclutha **United States** 1888 Priscilla Sloop **United States** 1889 Arthur Foss **Tugboat United States** 1890 Eureka **Paddle Steamer United States** 1891 Alma Schooner **United States** 1891 Nellie Oyster sloop **United States** 1892 Kestrel Steam yacht **United States** 1892 USS Olympia **Protected cruiser United States** 1893 Lettie G. Howard Schooner **United States** 1894 Effie M. Morrissey Schooner **United States 1895** C.A. Thaver Schooner **United States** 1896 SS Meteor **Steamer**

United States 1898 Berkeley **Ferryboat United States** 1900 Edward M. Cotter **Fireboat**

United States 1900 Regina M. Carry-away sloop

United States 1901 Gazela Primeiro **Barkentine United States 1901 Urger** Canal tugboat **United States** 1902 Jupiter **Tugboat United States** 1904 Barnegat (LV 79/WAL 506) Lightvessel **United States** 1904 Medea Steam yacht **United States** 1904 Swiftsure Lightvessel

United States 1905 Milwaukee Clipper **Passenger Steamer**

United States 1906 Baltimore **Tugboat United States** 1906 Ticonderoga Steamboat **United States** 1907 Ambrose Lightvessel **United States** 1907 Hercules **Tugboat United States** 1908 Sabino **Ferry United States** 1909 Duwamish **Fireboat United States** 1910 Sand Man **Tugboat** 1910 USS Texas **United States Battleship** 1911 Col. James M. Schoonmaker **Bulk freighter United States United States** 1914 Eppleton Hall **Tugboat**

United States 1914 Libby's No. 23 Sailboat **United States 1914 Pilot** Pilot boat

United States 1914 SS Lehigh Valley 79 Railroad car float **United States** 1915 Portsmouth (LV101) Lightvessel **United States** 1915 USS Arizona **Battleship United States** 1917 SS Valley Camp **Bulk freighter United States** 1918 W. P. Snyder Jr. **Towboat**

Country Launch Ship **Type United States** 1919 John Purves **Tugboat** 1920 Huron **United States** Lightvessel 1921 Day Peckinpaugh **United States** Canal motorship **United States** 1921 L. A. Dunton Schooner **United States** Showboat 1923 Majestic **United States** 1923 Modesty Sloop **United States** 1925 Montgomery Snagboat 1925 Ralph J. Scott **Fireboat United States United States** 1925 SS William G. Mather **Bulk freighter United States** 1926 Florence Western-rig dragger **United States** 1927 Derrick Boat No. 8 Floating derrick **United States** 1927 George M. Verity **Towboat United States** 1927 USCGC Alert **USCG** patrol boat **United States** 1927 USCGC McLane **Patrol Boat United States** 1928 Gerda III Lighthouse tender **United States** 1928 Katherine V Fish tug **United States** 1929 Fireboat No. 1 **Fireboat United States** 1929 Frying Pan Lightvessel **United States** 1929 WT Preston **Dredger United States** 1930 Chesapeake (LV116) Lightvessel **United States** 1930 Hope Fish tug **United States** 1930 W. O. Decker **Tugboat United States** 1931 Captain Meriwether Lewis **Dredger Railroad Car Ferry United States** 1931 City of Milwaukee **United States** 1931 John J. Harvey **Fireboat Auxiliary schooner United States** 1932 Brilliant **United States** 1932 Sergeant Floyd **Towboat United States** 1932 Victura Sailboat **United States** 1933 Nenana Sternwheeler **United States** 1933 USCGC Lilac Lighthouse tender **United States** 1934 RMS Queen Mary **Ocean Liner United States** 1934 USCGC Comanche Cutter **United States** 1934 USS Potomac **Yacht United States** 1934 William M. Black **Dredger United States** 1935 USCGC Taney Cutter **United States** 1936 Nantucket (LV-112) Lightvessel 1936 USCGC Ingham **United States** Cutter **United States** 1937 Kingston II Harbor tug **United States** 1938 Chancellor **Tugboat United States** 1938 Fire Fighter **Fireboat United States** 1938 Mary A. Whalen Oil tanker

CountryLaunchShipTypeUnited States1938 OverfallsLightvesselUnited States1938 SS William A. IrvinLake freighterUnited States1940 HogaDistrict harbor tug

United States 1940 USS North Carolina Battleship

United States 1941 HA. 19 Midget submarine United States 1941 HA. 8 Midget submarine

United States 1941 PT 48 PT Boat **United States** 1941 U-505 **Submarine United States 1941 USS Drum** Submarine **United States** 1941 USS Massachusetts **Battleship United States** 1941 USS Silversides **Submarine United States** 1942 Sherman Zwicker Schooner **United States** 1942 SS John W. Brown Cargo ship

United States 1942 USCGC Sundew USCG Seagoing Buoy Tenc

United States 1942 USS LST-325 Landing Ship, Tank
United States 1942 USS LST-393 Landing Ship, Tank

United States1942 USS AlabamaBattleshipUnited States1942 USS IowaBattleshipUnited States1942 USS LexingtonAircraft carrierUnited States1942 USS New JerseyBattleship

United States 1942 USS Stewart Destroyer escort

United States 1943 Ludington **Tugboat United States** 1943 Major Elisha K. Henson **Tugboat United States** 1943 PT 305 PT Boat **United States** 1943 PT 309 PT Boat 1943 PT 459 PT Boat **United States United States** 1943 PT 486 PT Boat **United States** 1943 SS Jeremiah O'Brien Cargo ship

United States 1943 USCGC Bramble Cutter/Buoy tender

United States 1943 USCGC Mackinaw **Icebreaker United States** 1943 USS Batfish **Submarine United States** 1943 USS Bowfin **Submarine United States** 1943 USS Cassin Young **Destroyer United States** 1943 USS Cavalla **Submarine United States** 1943 USS Cobia Submarine **United States 1943 USS Cod Submarine United States** 1943 USS Croaker **Submarine** 1943 USS Hornet **United States** Aircraft carrier Aircraft carrier **United States** 1943 USS Intrepid **United States** 1943 USS Kidd **Destroyer**

Country Launch Ship **Type United States** 1943 USS Laffey **Destroyer United States 1943 USS Ling Submarine United States** 1943 USS Lionfish **Submarine United States** 1943 USS Little Rock Light cruiser **United States** 1943 USS Pampanito **Submarine United States** 1943 USS Salem Heavy cruiser 1943 USS The Sullivans **United States Destroyer** 1943 USS Wisconsin **United States Battleship United States** 1943 USS Yorktown Aircraft carrier **United States** 1944 Angels Gate **Tugboat**

United States 1944 HA. 62-76 Midget submarine
United States 1944 SS Red Oak Victory Victory ship
United States 1944 USCGC Comanche Fleet tug

United States 1944 USCGC Acacia USCG seagoing buoy tende

United States 1944 USS Inaugural Minesweeper

United States 1944 USS LCI(L)-1091 Landing Craft Infantry
United States 1944 USS LCI(L)-713 Landing Craft Infantry
United States 1944 USS LCS(L)(3)-102 Landing Craft Support

United States 1944 USS Becuna **Submarine United States** 1944 USS Hazard Minesweeper **United States** 1944 USS Missouri **Battleship United States** 1944 USS Razorback **Submarine United States** 1944 USS Slater **Destroyer escort United States** 1944 USS Torsk **Submarine United States** 1945 PT 615 PT Boat PT Boat **United States** 1945 PT 617 **United States** 1945 PT 658 PT Boat **United States** 1945 PT 728 PT boat **United States** 1945 PT 796 PT Boat **United States** 1945 SS American Victory Cargo ship **United States** 1945 SS Lane Victory Cargo ship **United States** 1945 USS Clamagore **Submarine**

United States 1945 USS Joseph P. Kennedy, Jr. Destroyer
United States 1945 USS Midway Aircraft carrier
United States 1945 USS Orleck Destroyer
United States 1945 USS Requin Submarine
United States 1946 CG 36500 Lifeboat

United States 1946 MV Abegweit Icebreaking ferry

United States 1947 Portland Steam tug

United States 1947 Roann Eastern-rig dragger

United States 1950 Nantucket (WLV-612) Lightvessel **United States** 1950 Relief Lightship **United States** 1950 Star Fishing vessel **United States** 1953 Trieste **Bathyscaphe United States** 1953 USS Lucid Minesweeper **United States** 1953 USS Albacore **Submarine** 1953 USS Marlin **United States Submarine United States** 1954 John D. McKean **Fireboat United States** 1954 USS Nautilus Submarine **United States** 1955 SS X-1 **Submarine United States** 1955 USS Barry **Destroyer United States** 1958 USS Edson **Destroyer United States** 1958 USS Growler **Submarine United States** 1958 USS Turner Joy **Destroyer United States** 1959 NS Savannah **Nuclear merchant ship United States** 1959 USS Blueback **Submarine United States** 1961 PCF-104 **Patrol Craft Fast United States** 1962 PTF 3 Fast patrol boat **United States** 1964 Aluminaut **Submarine** 1965 K-77 **Submarine United States United States** 1965 PCF-1 **Patrol Craft Fast United States** 1967 B-39 **Submarine Helicopter Landing Trainer United States 1968 Baylander (IX-514) United States** 1968 CCB-18 **Command control boat United States** 1968 PCF-816 **Patrol Craft Fast** 1968 PTF 17 **United States** Fast patrol boat

Ship

Type

United States 1968 PTF 26 Fast patrol boat **United States** 1968 RV Hero Research vessel **United States** 1968 USS Dolphin **Submarine** Sloop **United States** 1969 Clearwater **United States 1969 Trieste II (DSV-1) Bathyscaphe United States** 1971 B-427 **Submarine**

United States 1977 CG 41410

United States1981 USS AriesHydrofoilUnited States1984 CalifornianSchooner

United States 1984 Hiddensee Missile Corvette

United States 1987 Breck Marshall Catboat United States 1989 USCGC Mohawk Cutter

Country

Launch