



# City of Richmond

## Report to Committee

**To:** Parks, Recreation and Cultural Services  
Committee

**Date:** January 19, 2015

**From:** Mike Redpath  
Senior Manager, Parks

**File:** 11-7140-20-  
BSH11/2015-Vol 01

**Re:** **Maritime Vessels at Britannia**

### Staff Recommendation

That the report "Maritime Vessels at Britannia" dated January 19, 2015, from the Senior Manager, Parks be received for information.

Mike Redpath  
Senior Manager, Parks  
(604-247-4942)

Att. 1

REPORT CONCURRENCE		
<b>ROUTED TO:</b>  Finance Division	<b>CONCURRENCE</b>  <input checked="checked" type="checkbox"/>	<b>CONCURRENCE OF GENERAL MANAGER</b>  
<b>REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE</b>	<b>INITIALS:</b>  	<b>APPROVED BY CAO</b>  

## **Staff Report**

### **Origin**

On November 29, 2011, the Parks, Recreation and Cultural Service Committee requested that staff report back on:

*(1) cost estimates for the restoration of the remaining vessels at the Britannia Heritage Shipyard; and*

*(2) cost estimates for the restoration of the Fleetwood for the following types of displays:*

*(a) a restoration suitable for the vessel to be on stationary display;*

*(b) a restoration that restores the vessel as much as possible as it currently stands in its modified condition; and*

*(c) a full restoration that brings the vessel back to its original condition.*

In April 2014, Council endorsed the Britannia Shipyards National Historic Site Strategic Plan 2014–2018. This report responds to the Britannia Strategic Focus Area No. 6 “Respect for Historical Integrity and Authenticity” section 6.1 *Develop and implement a vessel acquisition plan.*

The purpose of this report is in response to the above referral.

### **Background**

The Britannia Shipyards Maritime fleet currently consists of six vessels, two are owned by the City of Richmond and four are owned by the Britannia Heritage Shipyards Society (BHSS). Attachment 1 details the condition assessments for the BHSS owned vessels prepared by an independent Marine Surveyor in 2012. In May 2013 Britannia Heritage Shipyard Society Board of Directors meeting, BHSS approved the following motion “that the motorized fleet except the Merillee II be transferred to the City of Richmond.”

#### **City of Richmond Vessels**

The City of Richmond’s boats include the Silver Ann, the Portage Queen which are detailed as follows:

Vessel Name	Vessel Description	Restoration Costs	Estimated Annual Operating Cost
Silver Ann	34' gillnetter built in 1968-69 in the Richmond Boat Builders building at Britannia, the last boat built before operations shut down. The Silver Ann was fully restored in 2005-2009 by a group of trained shipwrights and volunteers. She was officially launched on July 1, 2009. The Silver Ann is currently operational and in good condition.	None required.	\$5000.00  Depending on usage and fuel costs.
Portage Queen	24' pleasure boat built in the mid-1800's and powered by an Easthope engine. She was restored in 2010 and donated to the City of Richmond in 2012. The Portage Queen is operational and in good condition.	None required.	\$1,000.00 Depending on usage and fuel costs.

The Silver Ann and the Portage Queen, currently owned by the City of Richmond, are in good, functioning condition and have great potential to support the activities of Britannia Shipyard both at the site and at off-site events and festivals. Given the history of the Silver Ann in particular (the last vessel actually constructed at the Britannia Shipyard), and its connection to the site at Britannia, there is value in continuing to maintain/preserve it as a vessel for festival uses, site education and programming, public maritime safety and as a experiential artefact on the river.

Image 1: Silver Ann 2011



Image 2: Portage Queen 2012



#### Britannia Heritage Shipyard Society (BHSS) Vessels

The BHSS, a not for profit volunteer society, has a focus and mandate to restore historic vessels using the Richmond Boat Builders Building at the Britannia Shipyards as their base of operation.

Presently there is no formal agreement with the BHSS for their activities at the site. Preparation of an agreement is in process and will be the subject of a future report to Council.

Over time, several vessels have been collected and restored to usable condition or partially restored by the Society. Some have been sold privately at market rates. The restoration and vessel acquisition activities of the BHSS have been done independently of the City by the volunteer organization.

The BHSS boats currently include the Merrilee II, the Iona, the Starliner and the Fleetwood (aka Rumrunner). The BHSS has requested the City consider assuming ownership of three of these boats; the Iona, the Starliner and the Fleetwood.

Should Council wish to acquire any of the BHSS marine vessels, staff would at Council's direction, bring forward any financial/capital and or projected operating budget implications for consideration and approval as part of the annual budgeting process.

<b>Vessel Name</b>	<b>Vessel Description</b>	<b>Restoration Costs</b>	<b>Estimated Annual Operating Cost</b>
Merrilee II	<p>34' pleasure boat built in 1950 and is currently being restored by the BHSS. Her condition is fair with some minor hull repairs and upgrading of electrical systems and refinishing required.</p> <p>The BHSS has completed the restoration work on the Merrilee II and will operate her as the Society's flagship vessel.</p>	BHSS has completed restoration of this vessel.	BHSS vessel, society funded.
Iona	37' fisheries collector vessel built in 1937. Acquired by the BHSS in 1991, restoration was undertaken by volunteers between 2009 - 2011.	<p>In September in 2012, a restoration assessment of \$5375 as detailed in Attachment 1 was completed. Deterioration of the vessel Iona since 2012 has presented significantly more restoration than is necessary.</p> <p>In January 2015, BHSS hired a Shipwright to do an assessment of the vessel to determine the full restoration program. Works are estimated to be approximately \$200,000. BHSS does not have the resources to complete the restoration.</p>	Estimated annual operating \$5000.00

Vessel Name	Vessel Description	Restoration Costs	Estimated Annual Operating Cost
Starliner	35' gillnetter that operated in the Fraser River. She is in very poor condition having been left unprotected and not maintained for many years.	The preliminary estimated cost to restore this vessel is \$250,000.	Currently in dry-dock storage, no operating impact at this time.
Fleetwood aka 'The Rumrunner' (originally named the Skeezyk)	56' vessel built by the Vancouver Shipyard in 1930 to transport contraband liquor from Canada to the US during prohibition.  She was converted to a pleasure vessel in 1934. The Fleetwood is in very poor condition having been not maintained for many years.	The preliminary estimated cost to restore her as a static display is \$141,000 plus 30% contingency: \$183,300.  The preliminary estimated cost to restore her in her present recreational configuration into functioning condition capable of traveling local waters is \$720,000 plus 30% contingency: \$936,000.  The preliminary estimated cost to restore her to her original configuration as the Skeezyk is \$985,000 plus 30% contingency: \$1,280,500 as this would require a complete reconstruction of the vessel.	To be determined subject to future use.

### The Iona

The Iona was built as a fisheries collector boat; a larger boat that collected fish from several smaller boats for delivery to the canneries. The City does not currently own an example of this type of vessel that was commonly used in the local fishing industry.

Should the City decide not to accept the Iona, it may be sold by BHSS, and remain at the site until it is sold.

Image 3: Iona late 2009



4475046



### The Starliner

The Starliner, a former gillnetter, is currently in very poor condition. The estimated restoration costs for the Starliner are high at \$250,000 plus. It remains on land and in storage.

Image 4: Starliner late 2009



The Starliner may be sold by BHSS, and remain at the site until disposed of.

### The Fleetwood ('Rumrunner')

Acquired by the BHSS Society in approximately 2002, the Fleetwood can be seen in Image 5. The Fleetwood was relocated into the Shipyard and became the first exhibit on display when visitors first entered into the main Britannia Shipyard building. The Fleetwood has been resting on the main ways (Image 6) of the once working shipyard, over time the BHSS restoration goals were stopped, and the vessel was interpreted through signage and oral narration during site tours. The vessel has been on static display for several years and is closed to public access, as it is not suitable for safe public access. The hull of the vessel Fleetwood is not currently suitable for submersion in water.

As part of the 2013 Capital program, Council approved funding for the restoration of the Shipyard ways. Part of the restoration of ways includes the temporary removal of the Fleetwood from the Shipyard. The Fleetwood is currently floated on a temporary structure behind the Phoenix Net Loft in the river (Image 7). The ways restoration program is scheduled to be completed by fall 2015.

The BHSS has indicated to the City their collective inability to maintain, and or restore the Fleetwood. The deterioration of the vessel as illustrated above reinforces the need for future action ranging from restoration to disposal. As the vessel has been left to deteriorate over time, and given the Society's lack of capacity and resources to complete such a large restoration project, ownership and control of the vessel by the City could ensure protection of the vessel for the future and site safety. Presently the vessel has been moved off of the marine ways to facilitate

necessary marine ways restoration work which was approved by Council as part of the 2013 capital budget process to restore the National Historic Site.

Image 5: Fleetwood in late 2002



Image 6: Fleetwood in 2013

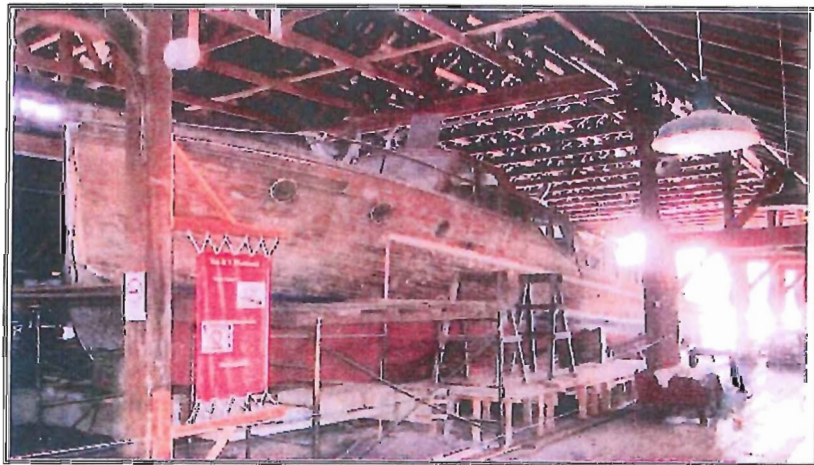


Image 7: Fleetwood in 2014—Wrapped and relocated to permit Shipyard restoration of marine ways.



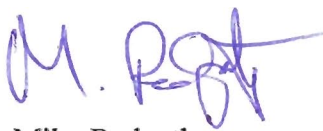
Should the City decide not to accept the Fleetwood, it may be sold by BHSS, and remain at the site until disposed of.

### **Financial Impact**

There are no anticipated additional operating budget increases proposed with this report. Should Council wish to acquire any of the BHSS marine vessels, staff would at Council's direction, bring forward any financial capital and or projected operating budget implications for consideration and approval as part of the annual budgeting process.

### **Conclusion**

This report details the current status of the marine vessels located at the Britannia Heritage Shipyard National Historic Site. As a maritime shipyard on the river, the presence of vessels at Britannia and the restoration of vessels helps to create a greater sense of place through experiential animation on the site and also to interpret the past for both current and future generations.



Mike Redpath  
Senior Manager, Parks  
(604-247-4942)



Dee Bowley-Cowan  
Britannia Site Supervisor  
(604-718-8044)

Att. 1: Condition Assessments for the BHSS Owned Vessels



# PHILIP J. OLDHAM MARINE SURVEYOR LTD.

215 East 28th Street, North Vancouver, British Columbia V7N 1C1 Canada  
Tel (604) 984-7286 • Fax (604) 984-7276 • eMail philipoldham@shaw.ca

September 17, 2012

City of Richmond  
Britannia Heritage Shipyard  
5180 Westwater Drive  
Richmond, B.C. V7E 6P3  
Attention Mr. Bryan Klassen

Dear Sirs;

RE: Donation of 24' power vessel  
Estate of Gary Cook  
File No. PO/1722-12

I have been asked to provide my opinion as to the value of the MV "PORTAGE QUEEN" for the purpose of providing the widow of Gary Cook with a taxable donation receipt.



## General Description

Length 24'  
Beam 6'6"

Construction believed to be carvel planked red cedar planking on oak ribs with varnished mahogany trim and varnished fir interior.

Propulsion functional vintage two cylinder EASTHOPE marine gasoline engine.

The vessel was reportedly built in the mid 1800s and restored by Gary Cook in approximately 2010. Restoration included rebuilding the interior to its present configuration and repairing the underwater hull surface and applying a sheathing of epoxy resin and fibreglass cloth.

## Condition;

The vessel was found to be in good restored condition.

## Valuation:

In my opinion the vessel has an estimated value of \$10,000.00. This amount takes into account the vintage value of the vessel and its engine.

The receipt should be made to:

Mrs. Kathryn Cook  
#806 – 168 Chadwick Court  
North Vancouver, B.C. V7M 3L4

Yours truly

*Philip J. Oldham*

Philip J. Oldham  
Marine Surveyor



# PHILIP J. OLDHAM MARINE SURVEYOR LTD.

215 East 28th Street, North Vancouver, British Columbia V7N 1C1 Canada  
Tel (604) 984-7286 • Fax (604) 984-7276 • eMail philipoldham@shaw.ca

June 29, 2012

Britannia Heritage Shipyard Society  
5180 Westwater Drive  
Richmond, B.C.  
V7E 6P3

Dear Sirs:

RE: Heritage vessels  
"IONA" "STARLINER" "MERILEE II" "FLEETWOOD"  
Restoration possibilities & cost  
File number PO/1630-12

I have been asked by the Britannia Heritage Shipyard Society to provide my opinion as to the restoration possibilities and estimated cost to restore the motor vessels "Iona", "Starliner" and "Merrilee II" to a functioning and operable condition.

In addition, I have been asked to provide my opinion as to the restoration possibility and cost to restore the motor vessel "Fleetwood" to three stages of restoration; to be a land based stationary public display, to be a floating, functional vessel for public display in her present configuration and to be a fully functional vessel with the original, rum runner configuration and propulsion.

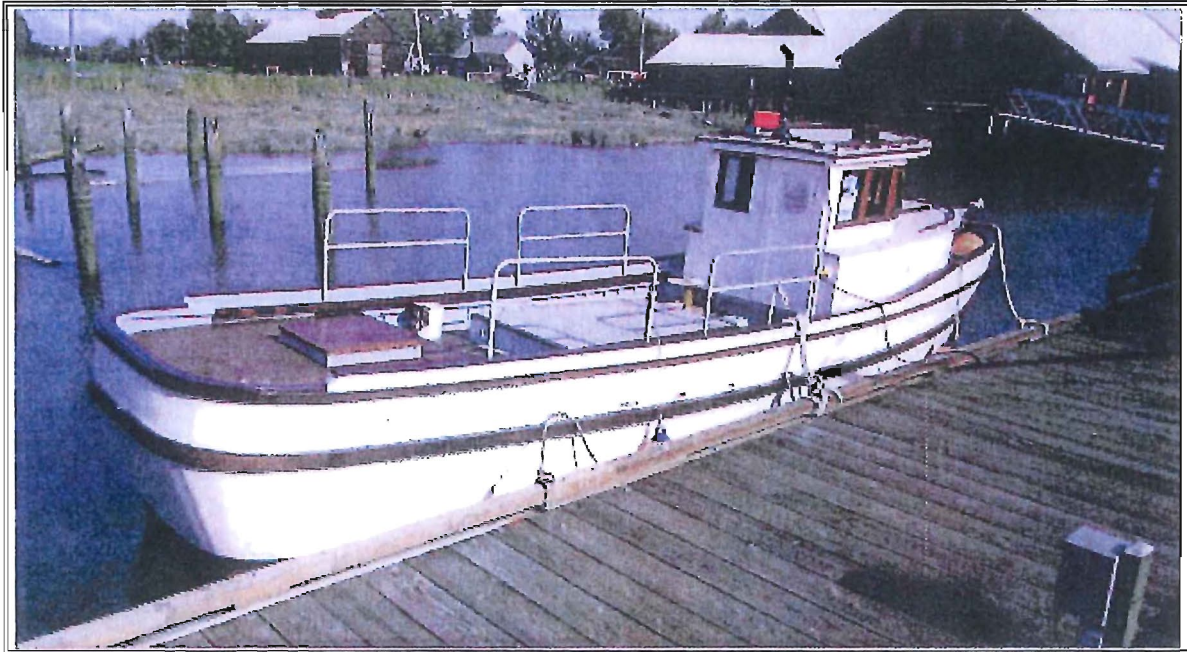
This report is based on information provided in the Restoration Possibilities and Preservation Plan report on the vessels dated August/November 2011

Restoration costs are based on a labor rate of \$65.00/hour plus materials. The labor rate does not take into consideration work completed by the Society's volunteer labor.

Information included in this report is the opinion of the undersigned and has been determined after consultation with industry professionals, reviewing information from internet sources and personal experience.

No guarantee is made with respect to the information presented.

## “TONA”



Originally built in approximately 1937 as a fisheries collector vessel, she was restored by the Richmond Boat Builders over the period 2009-2011, is presently floating and in good condition. Minor finishing work is to be completed including; ballasting, cabinetry in the wheelhouse and modifying the electrical system to comply with marine standards.

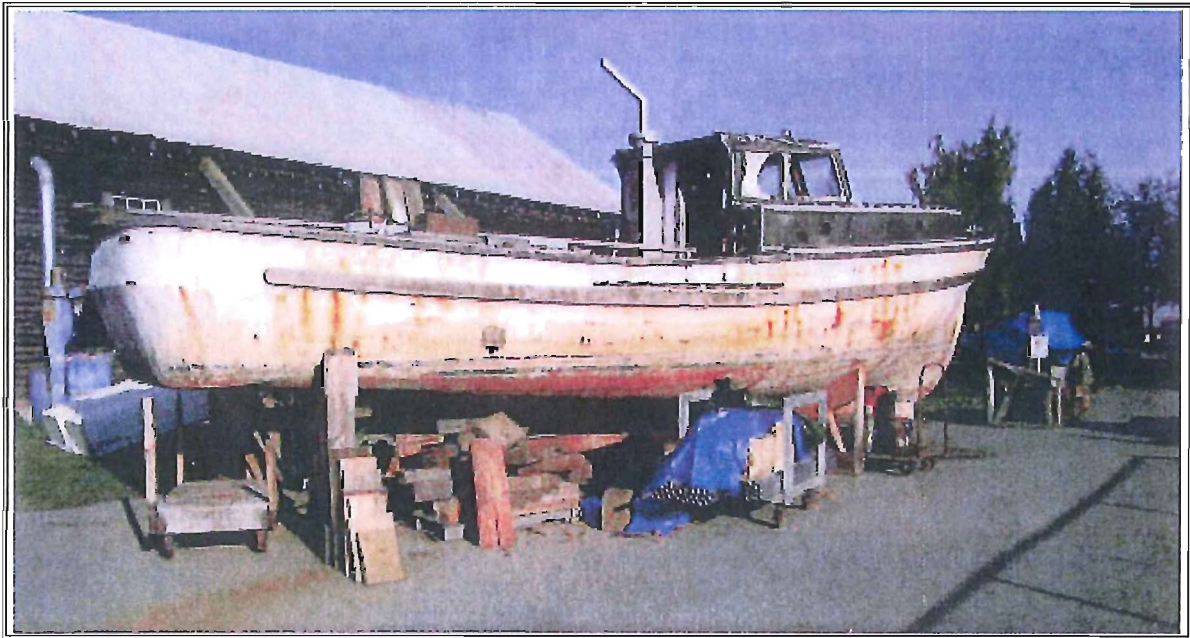
Cost to complete the outstanding work is estimated at

Labor - 75 hours @\$65/hr = \$4,875.00

Materials 500.00

Total \$5,375.00

## "STARLINER"



The vessel was originally designed and built as a gillnet fishing vessel operating in the Fraser river. She is in very poor condition having been left unprotected and not maintained for many years.

In order to determine a cost to restore the vessel, the cost to build a new, comparable vessel today was determined; discussions with local shipwrights indicated a replacement cost of approximately \$750,000, not including any fishing related equipment. As per the Restoration Possibilities report the basic hull may be restorable however, the superstructure, decks and interior would have to be rebuilt. It may be possible to rebuild the Ford gasoline engine but a diesel unit would be desirable.

It is my opinion the cost to restore this vessel would be approximately:

Labor -1 ½ man years (3,000 hrs) @ \$65/hr	\$195,000.00
Materials	50,000.00
Engine rebuild	5,000.00
Total	\$250,000.00

The cost of fishing related equipment would have to be researched separately as its availability is unknown.



## "MERRILEE II"



The vessel was designed for pleasure use by Ed Monk and built by Lloyd Griffith in 1950. She is presently under renovation by Richmond Boat Builders. Her condition as reported in the Restoration Possibilities report was good with minor hull repairs and upgrading of electrical systems and refinishing required. During this restoration all planking seams have been stripped and recaulked and the hull exterior repainted.

It is my opinion the cost to restore this vessel would be approximately:

Labor – 200 man days (1,400 hr) @\$65/hr	\$91,000.00
Materials	15,000.00
Total	\$106,000.00



“FLEETWOOD” ex “SKEEZIK”



The vessel was built by Vancouver Shipyard in 1930 for the transport of contraband liquor from Canada to the United States. She was converted to a pleasure vessel in 1934.

I have been asked to provide my opinion for three restoration options.

OPTION ONE;

Restoration to a suitable condition for her to be placed on land as a static display providing access for the public to walk through and view the vessel's interior.

Work to complete this option would involve general clean-up of the vessel and moving her from her present location on the ways to the display location (to be determined). It is assumed the vessel's superstructure would be modified to that of the "SKEEZIK"

Hull exterior; to fill damaged wood planking, repaint hull and refinish brightwork

Install two propeller shafts and propellers to show running gear during rum running career.

Superstructure; to remove existing superstructure and modify to rum runner configuration

Interior; to fit paneling to complete interior appearance, paint and finish brightwork

To repair cabin soles,

To install 120 volt wiring as per municipal code,

To clean machinery space, removing redundant equipment

To provide display material describing her rum running career and any relevant archival material.

It is my opinion the cost to prepare the vessel as a static, on-land display would be approximately:

Labor	200 man days (1,400 hr) @ \$65/hr	\$91,000.00
Materials		50,000.00
Total		\$141,000.00

OPTION TWO:

In her present (recreational) configuration restore her to a functioning condition capable of travelling local waters to boat shows and display functions.

In order to determine a cost to restore the vessel, the cost to build a new, comparable vessel today was determined; discussions with local shipwrights indicated an approximate replacement cost of \$3-4 million depending on the quality of finish.

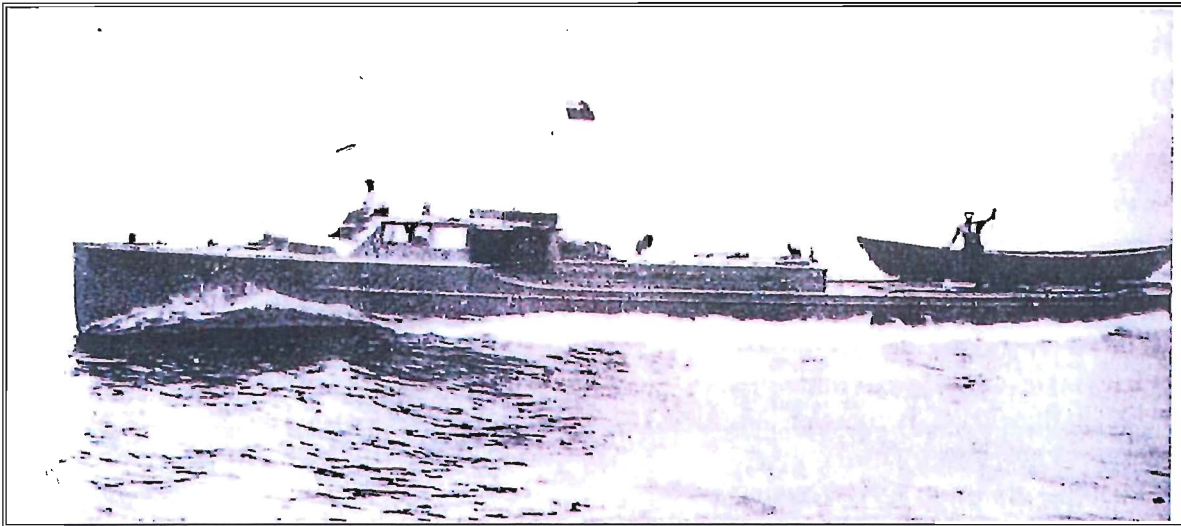
Three independent shipwrights inspected the vessel and each agreed the hull planking was not usable for a functioning vessel.

As reported in the Restoration Possibilities and Preservation Plan the vessel's structure is in poor condition and in order to restore her to a functioning condition the hull would have to be rebuilt. Much of the accommodation structure is usable and could be integrated in the final result. Fuel and water tanks would have to be replaced and all operating systems installed. The condition of the engine is unknown; I understand the engine was functional in 2001 & depending on the extent of preservation prior to lay-up the unit may be serviceable without rebuild.

A time estimate of four man years could be expected for completion of the restoration. The work could be completed where she lies on the ways.

It is my opinion the cost to restore this vessel would be approximately:

Labor 4 man years (8000 hrs) @\$65/hr	\$520,000.00
Materials	150,000.00
Engine rebuild	50,000.00
Total	\$720,000.00

OPTION THREE

To restore her to her original configuration as the "SKEEZIK" including the propulsion system, capable of travelling local waters to boat shows and display functions.

This option would require a virtual reconstruction of the vessel. As reported in Option Two, the hull structure must be rebuilt and the superstructure would have to be redesigned to conform to her original style. Vancouver Shipyard (now Seaspan) advises the original plans are not available.

With the exception of the propulsion system the reconstruction would probably be about the same as in Option Two (\$670,000.00).

An extensive search of the internet has revealed much information about the V12 engines but very little on units for sale; two were sold in England for \$55,000 each, one in Florida (installed in a replica 38' rum runner) for \$58,000.

The original propulsion system included a small diesel engine installed on the centerline for general purpose propulsion with the Liberty V12's for high speed performance. It is estimated such a unit might be in the range of 40 hp.

For the purpose of this report it is estimated a cost of \$250,000 could be expected to have the engines installed in the vessel.

It is my opinion the cost to restore the vessel as original would be approximately;

Labor 4 1/2 man years (9,000 hrs) @\$65/hr	\$585,000.00
Materials	150,000.00
Engines & systems	250,000.00
Total	\$985,000.00

#### OTHER OPTIONS

While it is preferable for the hull to be rebuilt thus restoring the vessel to her original condition, another option would be to laminate fibreglass and resin over the existing hull. This work would require removing the present coatings to expose the wood planking. Layers of fibreglassing resin and cloth could be applied, providing a water tight seal and some strength. In order to provide hull stability all deteriorated hull framing would have to be replaced or sistered.

This is not a long term solution but would save much of the cost of rebuilding the hull.

Estimated cost to apply fibreglass materials to the hull

Labor	\$100,000.00
Materials	25,000.00
Total	\$125,000.00

With respect to the vessel's engine; if inspection reveals the existing engine is inoperable or not repairable, the engine from the "Shuchona IV" may be used to replace the existing unit.

#### CONCLUSION

Each of the vessels discussed in this report will require a planned maintenance schedule and budget to preserve their restored condition.

*Philip J. Oldham*

Philip J. Oldham  
Marine Surveyor

