



We can save our oceans and us!

Cassiopeia Schooner Project



An Environmental and Humanitarian Project Using fleets of wooden ships to connect us with each other and our planet.

"We all know that upon man depends the fate of our troubled oceans, and of our planet, and it is in the oceans that lies the fate of man and of all living creatures" Jacques Cousteau.

As a non-profit organization devoted to environmental and social concerns, our fleets, their crews and the many supporters will promote cultural interchange, humanitarian projects, and environmental awareness in a unique and powerful way. Humans helping humans, and our planet.

We will sail our fleets of wooden schooners to economically and environmentally at risk coastal communities. Initiating on the ground actions by providing vessels and multi-skilled crew to empower locally existing humanitarian efforts, we will create positive change with tangible outcomes. Please join us as we initiate actions with our mothership, Cassiopeia II and sail towards creating our first fleet.

Facebook group:

<https://web.facebook.com/groups/444251059401800/?ref=bookmarks>

Website

<https://cassiopeiaschoonerproject.org/>

Funding link

https://www.gofundme.com/f/cassiopeia-schooner-project-buying-her-sistership?utm_source=customer&utm_medium=copy_link-tip&utm_campaign=p_cp+share-sheet

The Book "From the Bottom Up" by Harold Neel

<http://haroldneel.com/>

The Cassiopeia Schooner Project Mission Statement

The Cassiopeia Schooner Project Inc. is a registered non-profit corporation created to build and operate fleets of six wooden schooners for humanitarian purposes. The fleets are to be sailed around the world promoting peace between each other and our planet. Our multifaceted goals focus on environmental concerns at sea and ashore, along with addressing social justice, health, global equity, education, and economic empowerment.

By sailing into the bays of coastal communities bringing relief supplies and skilled individuals, the physical presence of the fleets and their crews in economically challenged areas will provide on the ground solutions for environmental and social issues. Collaborating with the existing local charitable and indigenous organizations, we can enhance the effects of their endeavors in a profound way. Six vessels with doctors, builders, marine biologist, agricultural experts, circus entertainers etc., will provide a unique and multi-faceted approach for creating well-being. Supplemented by other boaters and international travelers, we will have an effective boots on the ground strategy. With live feeds at sea and on shore we will create awareness and support from millions of digital followers.

Both at sea and ashore we will focus on spreading awareness of the plight of our oceans and environmental concerns ashore. Presenting real solutions unfolding live on social media, we can empower a global audience to participate in helping others in a unique way

What we have done to get started

The Captain of the project has traveled to Thailand and Carriacou to assess the facilities for the building of the fleets. In both countries there were extensive discussions with builders and community leaders, covering all of the issues ranging for ex-pat work forces and local labor to material cost and boatyard logistics and location. We have completed a detailed cost analysis which includes, material breakdowns, travel expenses, duties etc. which has been carefully assessed and endorsed by the original Cassiopeia's builder.

To initiate our actions we have acquired the 70 foot gaff rigged schooner Cassiopeia II as a Mother Ship. She is the sister ship of the original Cassiopeia built by the same builder, De Mateo Boatworks. She is of a very similar design with almost identical looks but is seven feet longer on deck. It seems a destined twist of fate that she became available to us! Here is link to a video of her <https://www.youtube.com/watch?v=nEa2FvGKVfg>

We took command of her one year ago in Savanna Georgia and sailed her to Fort Pierce Florida where she is now undergoing an extensive refit at the Riverside boatyard. We have raised \$70,000 USD in donations and have ben lent \$45,000 USD for her purchase and repairs to date. This "seed" funding for our initial effort is intended for us to initiate some actions with the mothership and create a track record to enhance the successful acquisition of funding for the overall project.

We have created a global audience of thousands which view "The Cassiopeia Schooner Report" presented on Facebook live every weeknight who follow our project. The enthusiasm and comments from this multinational "stalwart crew" who are from all walks of life, assures us about our awareness raising media capabilities. We are confident this crew will grow into a large multi-cultural worldwide support group. We created a website which can be used for product marketing and branding and are expanding our presentations to other media platforms.

What will be our first steps?

We are organizing our first aid mission after completing the refit, sailing to the Abacos islands of the Bahamas. They are still struggling to recover from the effects of Hurricane Dorian. We are collaborating with a local community leader about needs for materials and skills we can supply. After doing as many trips as we can from Florida to the Bahamas, we will sail to Antigua to participate in the famous Antigua Classic Yacht Regatta. The previous Cassiopeia won many honors there including the coveted Spirit of the Regatta award. We will show oceanographic data we have collected, and make presentations about solutions we have discovered.

We will then sail for Carriacou to initiate the building of the first fleet. We have already consulted with the local boat builders and community leaders about our project and they are very excited to get underway!

The issues we can address

Environmental objectives

- Climate change awareness and strategies
- Reef protection
- Fisheries depletion
- Recycling of waste
- Deforestation and land degradation
- Endangered species protection

Social objectives

- PEACE
- Poverty, disparity of wealth
- Women's rights and domestic violence
- Corruption in governance

Humanitarian objectives

- Clean water
- Health facilities
- Educational facilities
- Sustainable farming
- Economic sustainability

Project Funding

The goal of our fundraising approach is to find a small group or a single patron to finance the overall project. This would not only facilitate our immediate interest, which is to get the mothership operational and begin setting examples of what we can accomplish, but would allow us to immediately begin setting up the infrastructure for the building of the first fleet in Carriacou, Grenada.

At this time, raising the initial funds to accomplish the goals for the mother ship can allow us to create a track record of action with the Bahamian aid plan. We are confident this would lead to the overall funding plan for the fleet to be realized.

The spreadsheet in this document describes in detail the cost considered for the totals shown below. Our vision is to find private funding for the project itself, we can then focus all crowd funding efforts to be directed separately towards the specific projects and organizations we are collaborating with. We would like to avoid the need for further crowd funding for the Cassiopeia Schooner Project itself.

With our fleet of schooners provisioned and captained we can offer berths to doctors, dentist, marine biologist, builders and other volunteers at no cost to them. After our first year of operation we are confident we will be able to fund the continuing operation of the fleets through further private patrons and grant money from the various sources.

Proposed Funding for The Cassiopeia Schooner Project

Complete purchase and refit the mothership, Cassiopeia II	\$ 100,000 us
Immediately begin aid/awareness operations locally	
Year one, Build the fleet of six gaff rigged wooden schooners	\$1.4 million us
Projected to take one year by all builders consulted	
First year annual operation, maintenance, provisions, captains, first mates, and administration	<u>\$1.0 million us</u>
TOTAL	\$2.5 million us

Please review the spreadsheet beginning on page 11 for detailed information about costing.

Project Vision

We are starting with one vessel. We then wish to build our first fleet in Carriacou, Grenada. The concept is applicable to coastal communities and fishing villages around the world however and thus the vision includes multiple fleets empowered by this original example. The fleets consisting of six schooners each will sail to areas in need. With international crews of scientist, UN representatives, doctors, musicians, journalist, teachers, circus performers, yoga instructors, divers, IT technicians, farmers, sailors, islanders, ordinary people of all kinds, and you, the fleets will show how humans can help humans and our environment. Providing “on the ground” solutions for recycling, reef protection, fisheries management, land use, infrastructure, development, de-militarization, social and cultural growth, the fleets will sail from port to port creating visible improvements to the well-being of people on many levels.

The Cassiopeia Schooner Project will collaborate with the local institutions’ and consult with people of the area, thus projects can be specifically designed for the most effective benefits. The managers and captains of the project are experienced ex-pats and travelers well versed in the sensitivities to cultural necessities and stumbling blocks of aid in under developed and economically challenged communities.

Awareness leads to action!

- Awareness is the key to initiating change. Physical actions make change happen. We will provide both.
- With viewers and followers around the world our videos and social media presence will generate awareness of the diverse issues the fleet is working on. Live broadcast will allow contributors to see the results.
- Please enter “Harold Neel” in google search to find our current live performances every weeknight on Facebook. We already have an audience of thousands from around the globe viewing “the Cassiopeia Schooner Project Report” as an awareness campaign, without yet being “underway.” We are encouraged by the international nature and lifestyle diversity of our “stalwart crew”.

Doing something!

- These fleets, built by the community, will give an economic and inspirational boost to the coastal community where they are constructed. The building technique is familiar to local fishermen and shipwrights. The fleets can then be used in that coastal area in multiple ways including getting “eyes” on the water in conservations zones, delivering emergency supplies, and participating in the many possibilities listed below.
- The physical presence of the schooners and their crews will ensure that actions happen “on the ground.” International visitors joining in at the fleets destinations can pitch in, while learning the ways that others live and the joys of helping.
- Crew can create support movements posting to their own groups, creating virtual technical assistance, ideas, and investment for specific projects. Their friends can share on social media, blog, tweet, Instagram etc., and join the project’s think tanks to develop real solutions for both the specific and the grand challenges.

Humans for humans!

- This is an international fleet of schooners. Our crews and supporters will be from all over the world. The oceans have no boundaries. Not tied to any national, political, religious or cultural restrictions these fleets will represent humanity solving humanities problems.
- With the oceans and her struggles as our base objective, we will also solve land based environmental issues, we will resolve social issues, effect economic problems, promote peace and demilitarization, and improve health situations.

Real solutions!

- The creators of this project are experienced “Ex-pats” having an understanding of how to “get things done” in culturally diverse areas, which will facilitate our effectiveness.
- Using the ideas, research, skills and financial support of our global community, the crews and visitors who are actually in the places we are helping can co-ordinate with the locals about what they REALLY need.
- Massive aid organizations often miss the mark but we will be there, LIVE, adapting and improving our approach with everyone watching. Our efforts will come from the hearts of millions of viewers directly into the hands of real people doing real things.
- This project will be completely transparent, its successes and mistakes presented live and there for all to see.

How we will do it

At Sea

- As a fleet, the Schooners will travel the oceans collecting data on a variety of concerns. From water temperatures, microfibers of plastic, salinity levels, noise levels, fish stocks, plankton levels, weather and many other scientific data bases. The collection of ghost nets and other garbage will also easily fit into the passages.
- The personal stories of the crew, as they learn the ways of Mother Ocean, when shared live with their friends and followers, will generate a wide audience of people learning what it is like aboard a wooden schooner at sea, portraying the glories and challenges of Mother Ocean.

In Port

- The crews of the fleet will be hands on at finding solutions for protecting fringing reefs, eroding shorelines, plastic, farming, health, etc. The physical presence of real people providing labor and skills will facilitate long term solutions.
- By attracting visitors to the port where the fleet is moored, the local economies can be boosted and even more hands will be available for improving the well-being of the people and the environment in each port.

The internet and “real” news

- The internet is a great gift for creating a global community. The use of all digital capabilities by the fleet will draw millions of followers creating a community of caring humans like no other. Watching and aiding the actions of the crews virtually, seeing the solutions the fleet and her

crews and visitors provide, will generate a much needed sense of hope for people around the world that things CAN be changed.

- Using the virtual reality experience and tapping into the new Metaverse capabilities to share the adventures will draw viewers and provide them with live insights into the watery part of our world and the villages. This will be “real” news, likely challenging the views often presented by today’s media and showing undeniable live truth, the viewer’s impressions of the world around them then based on the shared personal experiences of the crews and visitors.
- The romance of Gaff rigged wooden sailing vessels will attract viewers with the sheer beauty of the fleet. By showing the families, children, and individual stories of people in ports across the globe, an understanding of the similarities between us all will grow. Our media content will inherently be on a very human level.
- Posting to other sailing groups, environmental action groups, human rights groups and others, the actions of the fleet will be supported by activist of all kinds from around the world.

Affiliations

- Collaborating with the many organizations already doing amazing things at our destinations is the foundation of what this project will do in communities. Bringing volunteers, attention and funding to existing struggling reef projects, health projects, infrastructure projects, agricultural projects and many other endeavors presently underway is an effective way for our fleet to generate real change.
- Those organizations have been there, know the terrain, the politics, the customs and the needs to help guide our efforts.

What actions can we take?

We love the ocean. We will start there.

But these fleets are not restricted to just one cause or detail of our many environmental and social issues. One of the many unique aspects of the project is the multi-faceted possibilities. So here are lots of ideas.

Plastic

- A huge problem so that will always be a starting point for each port of call. It will be an ongoing focus for the fleet. They will be equipped for gathering plastic, monitoring plastic, facilitating the installation of plastic recycling technologies in every port and other creative solutions of local plastic problems.
- We will effect pollution control in general by showing the sources and providing solutions developed by our global internet crew base and collaborating with local environmental groups.

Reefs

- These ecosystems support innumerable species we cannot afford to lose. The protection of reefs from overfishing, sedimentation, and other locally created man made issues, can be effectively implemented with the physical presence of the fleet and its visitors. Such as installing sediment fences where developers have not,

- Reef protection using conservation zones. The crew can help gain local support by initiating permaculture gardens for daily sustenance and disaster resiliency. This can allow the local fishermen to stop fishing their reef to allow regeneration. This will include the planting of coral. And other reef protecting systems including the building of silt fences where developers have not.

Fish

- An important resource for humanity that needs to be managed on a global scale. The open ocean is for all of us. Our fleet will bring awareness to the consumers of the world about the current fishing methods and the dangerous overfishing practices now happening.
- We will use media exposure to encourage consumer driven ways to replenish fish stocks and the health of the oceans delicate ecosystem.
- We can help monitor current protected zones and promote new ones.
- We can initiate permaculture gardens to provide food resiliency for increasingly severe weather events and reduce the demand on fish stocks. We can then help create fishing moratoriums. allowing the stocks to replenish.

Geopolitical, industrial

- Governmental maneuverings affect the oceans and island nations in often unseen and powerful ways. Fishing rights for large stocks are often traded for development projects in small Island nations. Giant infrastructure projects and industrial loans effect policy making, often severely impacting the environment of pristine island areas. Internationally publicizing potential policy decisions will affect outcomes with awareness.
- The mining industry is one example of an industry globally using its massive funding to override environmental protection policies of weak governments. We can bring live footage of mining areas to millions.

Health

- Health issues are one of the major repercussions of the disparity of wealth between island nations and the “developed” world. The most basic remedies for simple conditions such as diarrhea are often unavailable.
- Education about hygiene can have huge impacts on the health of small communities. Nutrition is directly related to health, as has been seen in many examples where dietary habits have been changed with new crops and information.
- Our fleets can bring doctors and educators to remote areas previously untouched by aid organizations.

Social

- These issues in the islands are often complex. Problems connected to cultural belief systems trying to integrate “first world” influences, the local responses to crime, domestic violence, women’s rights, general human rights, and economic pressures, are in the forefront of many communities’ struggles.

- There are already many efforts in place for solving these issues. With the additional help of our affiliates and internet supporters the diversely skilled crew that is “actually there” we can create effective collaborations.

Economic Empowerment

- The awareness of how global corporations operate in the less regulated world of the islands and poor coastal regions is lacking in modern media. Sustainable compensation for resources can be created with media campaigns using live video feeds.
- Our abilities to install infrastructure for economic development include technologies, agriculture and fisheries.
- We can expose local entrepreneurs to a global audience providing investment from multiple sources.

People with disabilities

- Working with designers for accessibility to people with disabilities, the schooners will be equipped to handle a wide variety of disabilities.
- We can support organizations wherever we sail by using the vessels to allow access to the ocean for the physically challenged.

Resilience

- Island peoples are bracing against rising sea levels and changing weather patterns. This is a common concern for modern NGO’S working in under developed areas.
- The many ramifications of climate change are already threatening island communities around the world. We can help using education, applying new building techniques, infrastructure improvements and food security systems.

Our imaginations will create limitless possibilities!

- Getting locals on the sea to show them their beautiful islands, from the ocean. Reefs, shorelines, outlying islands, will be seen as they reconnect with Mother Ocean.
- Raft ups at anchor with local leaders aboard. Religious, political, business, artist, all creating dialogue. (Six boats could have 150 people aboard!)
- Training seminars for skills like carpentry, welding, computer skills, etc.
- Attracting hundreds of visitors to a port where we are moored for volunteer working /vacations. The visit will include a free sail aboard a schooner!
- Live online Think tanks about projects to support and create community solutions.
- Live online interactions with locals and supporters. Bringing the “first world” into the “third” and visa-versa
- Sailing expeditions for local politicians and religious leaders which will include presentations by foreign dignitaries and professionals.
- Watery concerts with international music and movie stars.
- Circus performances. Swinging in the rigging and clowning on the decks.
- Youth programs, involving team-work, family planning and technologies for educational systems.
- Hauling cargo. Solar, recycling machines, building materials, people, seeds....

- Regattas aiding the creation of festivals and the promotion of boat building.
- Day sails for the disabled
- Your idea here.....

Please Join Me in This Dream

As a man of the sea, I will now use my skills to guide a fleet of vessels to create awareness, collective actions and new dreams for humanity and our wet planet. For 32 years the floor of my home has been 2 feet below the surface of Mother Ocean, 1 ½" planks were all that separated me from her magical waters. She has gifted me with wonder and awe at her beauty and her power. I have seen the incredible diversity of life below her surface, a thriving ecosystem of color and dance. Above, I have navigated her expanses harnessing the wind to diverse lands and cultures, seeing the common bonds of mankind. I have a deep love for the ocean and the lessons she has shared with me. I now hear her crying out for help. I know her and can see ways to give her a chance to heal. I'm now committing all of my energies to giving her that chance by linking millions of humans with both her and each other. I will use our mothership, and soon a fleet of wooden schooners to focus humanities compassion, skills and dreams for the betterment of us all. My life aboard the lovely Cassiopeia has inspired me to believe there are no impossible dreams for you, me and all of us. This fleet of her daughters will be her legacy, making dreams come true around the world.

Sincerely, Harold

Please contact me with any questions 1 512 962 1641

Please review the following pages for a detailed overview for the development of the Thailand fleet. The builders of the Carriacou fleet have reviewed these costings carefully and believe they can easily match the figures presented. We have endeavored to count every fastener, plank, hour of labor, travel, accommodation, government fees, and have included a contingency pad. The builders who have reviewed the spreadsheet all are in agreement the numbers are ample and probably can be reduced. Sponsorships for some of the materials and equipment could significantly reduce the cost of outfitting the fleet.

The Cassiopeia Schooner Project Cost Analysis



Build a Fleet of Six Wooden Schooners

and operate them for the first year; Saving the Oceans and Us!

The Cassiopeia Schooner Project has been created to build six wooden vessels and sail them as a fleet to ports around the world promoting peace, environmental solutions and social change. This worksheet is a cost analysis for building the fleet and operating it for one year. Each vessel will be modeled after the Cassiopeia, a 63 foot overall gaff rigged schooner launched in 1978 by De Mateo Boat works in North Carolina. Rob De Mateo, the original builder of Cassiopeia, is to personally supervise the building of the fleet. The project has chosen Thailand for the building of the vessels due to affordable labor costs and the wooden boat building skills available. A boatyard has provided quotes for land usage, launching etc. and labor estimates are based on quotes from Thai contractors and Mark Horward, an Australian boat builder who has operated in Thailand for 30 years.

NOTES:

1. ALL AMOUNTS IN USD: EXCHANGE RATE USED FOR BAHT TO USD (Correct As of: 9 JULY 2019) 0.03080
2. ALL MEASUREMENTS ARE IMPERIAL (INCHES, FEET, POUNDS AND GALLONS)

ITEM#

1	A. First Year/Build Year: Yearly Administration and Business Operation Cost	\$146,000
2		
3	B. Building the Schooners: A one Year Project in Phuket Thailand	\$1,338,712
4		
5	C. Second Year: Yearly Operation of the Fleet	\$855,750
6		
7	Contingency Padding for Unforseen Build and Business Expenses	\$200,000
8	D. See addendum for purchase and re-fit of mother ship	\$100,000
9	Two years working towards saving the the Oceans and Us!	\$2,494,462
10		

11 **SUPPLEMENTARY NOTES:**

- 12 **A.** * Administrators salaries have been approved by individuals interested in the positions.
13 * Accounting and other services to be provided in Thailand are well padded estimates.
14 * Promotional subcontractors could well be self funded, reducing cost.
15
- 16 **B.** * Timber cost is based on retail.
17 * It is likely these costs will be reduced significantly by using a wholesaler interested in the project.
18 * Discussions with him are underway involving tax benefits for donations of significant portions of the timber.
19 * Many other materials, ie: fit out and electronics (\$29,100) could also be "sponsored" by parent companies as support.
20 * The four ex-pat salaries have been approved by interested individuals.
21 * There is inspiring interest among the ex-pat Yachting services community in Phuket, thus much of the labor cost will be reduced by "volunteers" who have work permits and already live there.
22 * The local ex-pat builder, Mark Horward, has 30 years experience in Thailand and has built 28 boats there, many of them wooden.
23 * The time estimate of a one year build has been readily approved by Mark, (having studied the design).
24 * The original builder, Rob De Mateo, completed the entire build of Cassiopeia in one year at the age of 27 with only his Dads help.
25 He is to be the head shipwright of the project. He is a consummate sailor and believes in the goals of the project, including the viability of a one year build for the six vessels.
26 * We will lobby for Telstra/ Elon sponsorship for electric auxzillary engines and batteries. Dreams come true!
27 * Many volunteers, previous Cassiopeia crew and supporters from around the globe will visit and contribute physically to the building processes, reducing costs.
28
29
30
31
- 32 **C.** * These figures allow for a very professional and well fed crew, along with a well maintained vessel.
33 * It is likely that these cost could be reduced with "Volunteer, fed and housed" Captains and crew.
34 * To ensure projections include the necessities of experienced sailors, these salaries have been included.
35 * There is also the possibilty that the remaning 4 to 6 crew will be contributing to the provisioning cost as "shared expense crew" or even "charter" guest, but the included figures allow for all crew to be provided for.
36 * We intend to attract marine biologists, divers, philanthropists, doctors, gurus, social workers, circus performers and even politicians, so their "room and board" is built in to assure ease of participation.
37
38

The following pages are a full breakdown for labor, materials, administration, and all cost associated with the first two years of the project. The schedule includes one year for the build and one year of operations. Following this, the project will re-monetized itself using its track record to attract further funding from private investors and media monetization. The Mothership will be completing humanitarian work as the fleet is being built.

86	Frames				
87		1 x 4 x 16	200	\$8	\$1,600
88		2 x 12 x 16	10	\$38	\$380
89	Planks				
90		2 x 12 x 16	66	\$38	\$2,508
91		2 x 10 x 16	30	\$27	\$810
92		2 x 8 x 16	36	\$18	\$648
93	Bulkheads				
94		2 x 12 x 16	6	\$38	\$228
95		2 x 4 x 16	10	\$10	\$100
96		4 x 8 x 3/4 Plywood	14	\$32	\$448
97		Watertight doors	5	\$250	\$1,250
98	Sheer clamp				
99		1 x 8 x 16	18	\$12	\$216
100	Bulwharks				
101		1 X 6 x 16	12	\$10	\$120
102		2 x 4 x 16	6	\$10	\$60
103		1 x 4 x 16	6	\$8	\$48
104	Ring beam saloon				
105		2 x 12 x 16	2	\$38	\$76
106	Ring beam aft cabin				
107		2 x 12 x 16	2	\$38	\$76
108	Stringers				
109		1 x 4 x 16	24	\$8	\$192
110	Deck beams				
111		4 x 4 x 16	15	\$20	\$300
112	Sole beams				
113		2 x 4 x 16	10	\$10	\$100
114	Transom framing				
115		2 x 4 x 16	2	\$10	\$20
116		2 x 12 x 16	2	\$40	\$80
117	Pilot house framing				
118		2 x 4 x 16	8	\$10	\$80
119		2 x 6 x 16	3	\$14	\$42
120	Pilot house roof				
121		4 x 8 x 1/2 Plywood	3	\$27	\$81
122	Pilot house walls				
123		4 x 8 x 1/2 Plywood	7	\$27	\$189
124	Pilot house sole				
125		2 x 4 x 16	4	\$10	\$40
126		4 x 8 x 3/4 Plywood	1	\$35	\$35
127	Pilot house interior				
128		4 x 8 x 1/2 Plywood	2	\$27	\$54
129	Engine supports				
130		4 x 8 x 16	2	\$50	\$100
131	Deck				
132		4 x 8 x 3/4 Plywood	26	\$35	\$910
133		Fiberglass,matt/resin	1	\$300	\$300
134		Non-skid, 5 gallons	1	\$300	\$300

185	Running rigging					
186	Halyards	1/2 inch	3 spools	\$667	\$2,000	
187	Sheets	3-strand/ft	100	\$4	\$400	
188	Blocks					
189		Single	6	\$75	\$450	
190		With becket	8	\$75	\$600	
191		Double	4	\$75	\$300	
192		With becket	4	\$75	\$300	
193		Triple	2	\$75	\$150	
194		With becket	2	\$75	\$150	
195	Main sheet					
196		Double	1	\$75	\$75	
197		With becket	1	\$75	\$75	
198	Winches		2	\$350	\$700	
199	Traveler bars					
200		Main	1	\$175	\$175	
201		Fore	1	\$150	\$150	
202		Staysail	1	\$100	\$100	
203		Backing plates	6	\$17	\$102	
204				Rigging Total	\$11,627	
205	Fasteners					
206		Keel bolts	80	\$6	\$480	
207		Frames screws various	10	\$20	\$200	
208		Planks bolts various bo	28	\$50	\$1,400	
209		Deck screws 3" box	10	\$30	\$300	
210		Cabin sole screws 2"	2	\$25	\$50	
211		Bulkhead framing scre	2	\$25	\$50	
212		Iron work bracing	12	\$30	\$360	
213		Interior screws/bolts v	12	\$25	\$300	
214		Gun nails monell box	3	\$75	\$225	
215		Misc	8	\$25	\$200	
216						
217				Fasteners Total	\$3,565	
218	Systems					
219	Steering Gear					
220		Cables 7 x 19 3/8 wire	50	\$2	\$100	
221		Bronze Turning blocks	10	\$40	\$400	
222		Sails, full set, main, fore, staysail, flying	1	\$8,000	\$8,000	
223		Fuel Tanks	3	\$150	\$450	
224		Water Tanks	4	\$150	\$600	
225		Holding tank	1	\$175	\$175	
226		Hoses for above/ft	50	\$1.50	\$75	
227		Anchor windlass	1	\$1,500	\$1,500	
228		Engine (maybe electric Tesla/Elon dona	1	\$4,000	\$4,000	
229		Gearbox	1	\$1,500	\$1,500	
230		Motor mounts	4	\$75	\$300	
231		Exhaust, vernalift syste	1	\$200	\$200	
232		Hoses ft	15	\$10	\$150	
233		Filters	1	\$300	\$300	
234		Valves	5	\$30	\$150	
235		Exhaust fan	1	\$75	\$75	

236	Propeller shaft		1	\$200	\$200
237		Coupling	1	\$150	\$150
238		Cutlass bearing	1	\$75	\$75
239		Stuffing box	1	\$150	\$150
240	Propeller		1	\$400	\$400
241		Zinc	1	\$35	\$35
242	Bilge pumps				
243		Electric	6	\$100	\$600
244		Manual	2	\$125	\$250
245	Through hull fittings				
246		1 1/2	1	\$150	\$150
247		3/4	2	\$75	\$150
248	Generator		1	\$2,500	\$2,500
249	Head		1	\$300	\$300
250		Shower	1	\$50	\$50
251	Fresh Water Pump		1	\$200	\$200
252		Hoses 3/4 inch per foot	75	\$2	\$150
253	Electrical				
254		Batteries, separate bank	4	\$500	\$2,000
255		Wire spool of # 10	1	\$500	\$500
256		Panel	1	\$150	\$150
257		Fittings	box	\$200	\$200
258		Labor	Have found a volunteer		\$0
259		Running lights	3	\$50	\$150
260		Spreader lights	2	\$38	\$75
261		Interior lights	14	\$18	\$250
262		Fans	7	\$50	\$350
263		Solar panels	3	\$133	\$400
264		Solar controller	1	\$150	\$150
265		Inverter/charger	1	\$3,000	\$3,000
266	Refridgeration				
267		House hold	1	\$300	\$300
268		Freezer/built in	1	\$1,000	\$1,000
269	Stove		1	\$3,000	\$3,000
270	Sink		1	\$100	\$100
271		Faucets	2	\$36	\$75
272		Foot pumps	2	\$75	\$150
273					
274				Systems Total	\$35,185
275	Interior				
276	Hull sealing				
277		Pine 1.2 inch by 6 inch	400	\$3	\$1,200
278	Bunks				
279		Cushions	6	\$100	\$600
280	Settee				
281		Table	1	\$300	\$300
282		Cushions	6	\$67	\$400
283	Trim				
284		200 feet mahog	200	\$1.50	\$300
285	Storage				
286		Plywood and trim per	5	\$50	\$250

287	Galley				
288	Countertops	3	\$100	\$300	
289	Drawer units	4	\$125	\$500	
290	Head				
291	Sink	1	\$50	\$50	
292	Shower compartment fiberglass head walls	1	\$125	\$125	
293	Cabinets	2	\$100	\$200	
294					
295			Interior Total		\$4,225
296	Paint, seam caulking				
297	Caulking				
298	Oakum bail	5	\$50	\$500	
299	Cotton bail	10	\$50	\$1,000	
300	Seam compound				
301	Bondo gallons	5	\$40	\$200	
302	Topsides gallons	10	\$25	\$250	
303	Primers	2	\$75	\$150	
304	Bottom gallons	15	\$100	\$1,500	
305	Primers gallons	5	\$60	\$300	
306	Interior gallons	10 gallons	\$25	\$250	
307	Other				
308	Epoxy resin kits	4	\$100	\$400	
309	Polyaester resin gallons	5	\$50	\$250	
310	Fiberglass cloth yds	75	\$2	\$150	
311	Tar gallons	5	\$50	\$250	
312	3m 5200	10	\$20	\$200	
313	Caulk	20	\$10	\$200	
314					
315			Paint, seam caulking Total		\$5,600
316	Fit Out Gear				
317	Electronics				
318	Chart plotter/sounder	1	\$3,500	\$3,500	
319	Radar	1	\$2,500	\$2,500	
320	SSB or Sat phone	1	\$2,500	\$2,500	
321	Mobile Phone, Laptop, Internet	1	\$2,500	\$2,500	
322	Epirb	1	\$500	\$500	
323	Awnings	2	\$300	\$600	
324	Dive compressor & dive gear	1	\$4,000	\$4,000	
325	Inflatable Dinghy	1	\$3,500	\$3,500	
326	Outboard	1	\$2,000	\$2,000	
327	Rowing Dinghy	1	\$4,000	\$4,000	
328	Liferaft	1	\$3,500	\$3,500	
329					
330	Note: some fitout gear will be sponsored by manufacturer		Fit Out Gear per vessel Total		\$29,100
331					
332	Shipping				
333	6 X 40 foot containers from Louisiana to Phuket		\$3,000	\$18,000	\$3,000
334					
335					
	Materials Including fit out and shipping TOTAL per Vessel				\$116,958

336	Local Labor	2020
337	Days in the Year 2020	366
338	Months/year (Wages paid monthly)	12
339	Weeks/year	52.3
340	Paid Public Holidays/year	24
341	Paid Leave (14) and Max Sick Leave (3)	44
342	Available Days	298
343	Working Weeks Available/year	52
344	Working Days/week	5.5
345	Total # of Workers	25
346	Severance Pay - Under 1 Year Employr	30

348	Cost for local labor	# of Staff Required	BAHT Per Day Each	Total Staff Cost in BAHT Per Day	Total Staff Cost in BAHT Per Month	Total Staff Cost in BAHT Per Year	Total Staff Cost in USD Per Year	Individual Staff Cost in USD Per DAY
349	*** Skilled work	8	1,200	9,600	230,057	2,760,686	\$85,029	\$36.96
350	*** Labor	12	800	9,600	230,057	2,760,686	\$85,029	\$24.64
351	*** Manager Ha	1	1,500	1,500	35,946	431,357	\$13,286	\$46.20
352	Marks Shop							
353	*** Labor	3	1,500	4,500	107,839	1,294,071	\$39,857	\$46.20
354	Mark 4hrs/day 48 weel	1	6,600	6,600	145,200	1,742,400	\$53,666	\$203.28
355	1,650 BAHT/Hr							
356								
357	Worker's Social Security BAHT Contribution/Mont			750	18,750	225,000	\$6,930	
358	Employer's Social Security BAHT Contribution/M			750	18,750	225,000	\$6,930	
359	Workmen Compensation Fund Contribution PA			1.0%		89,892	\$2,769	
360	*** Severance Pay					756,000	\$23,285	
361								
362				Local Labor Total	786,600	10,285,092	\$316,781	
363				Local Labor per Vessel				\$52,797

365 **Ex-pat labor, Philang**

365			USD PA	
366	Rob Salary		\$50,000	
367	Travel		\$1,500	
368	Work permit		\$1,000	
369				
370	Geoffe Salary		\$50,000	
371	Travel		\$1,500	
372	Work permit		\$1,000	
373				
374	Sandgi Salary		\$18,000	
375	Travel		\$1,500	
376	Work permit		\$1,000	
377				
378	Kristen Salary		\$18,000	
379	Travel		\$1,500	
380	Work permit		\$1,000	
381				
382	Ex-pat labor @ Philang		\$146,000	
383	Ex-pat labor @ Philang per Vessel			\$24,333

384	Ex-pat housing, travel, transport etc.				
385	Accomodation				
387	Rental housing for Expat Build Crew	25,000 baht/mc		\$9,000	
388	5 bedroom house				
389	Airfares	20 flights FIFO		\$32,000	
390					
391	Office	Truck	used Nissan dual cab	\$10,000	
392		Fuel	7 gallons a week @ \$4	\$28	52
393		Tools		\$5,500	
394					
395	Ex-pat housing, travel, transport etc. Total			\$57,956	
396	Ex-pat housing, travel, transport etc. Total per Vessel				\$9,659
397					
398	Boatyard	BAHT/Mo nth	BAHT/Year	USD PA	
399	Land rent	180,000	2,160,000	\$66,528	
400	Office rent	12,000	144,000	\$4,435	
401	Electricity/water	10,000	120,000	\$3,696	
402	Boatyard Insurance \$2,000/vessel/year		389,610	\$12,000	
403	Building construction		480,000	\$14,784	
404	Launch including crane/80,000/vessel		480,000	\$14,784	
405					
406		Boatyard Total	3,773,610	\$116,227	
407		Boatyard Total per Vessel			\$19,371
408					
409					
410	Building the Schooners Total per Vessel				\$223,119
411					
412	Building the Schooners Total				\$1,338,712

413 **C. Second Year: Yearly Operation of the Fleet**

414					
415			PER VESSEL USD PA		FLEET USD PA
416	One Captain per Vessel			\$50,000	\$300,000
417	One Fulltime First Mate			\$30,000	\$180,000
418	Note; We expect to have many volunteers to reduce Capt/crew costs				
419	Operation				
420	Provisions	365 * \$125	6	\$45,625	\$273,750
421	Fuel & Lubricants		6	\$1,000	\$6,000
422	Customs/Marinas etc		6	\$4,000	\$24,000
423	Fleet Insurance		6	\$2,000	\$12,000
424	Maintenance		6	\$10,000	\$60,000
425	Yearly cost per Vessel			\$142,625	
426	Yearly Operating Cost for the Fleet				\$855,750

D. Addendum for purchase and refit of Mothership Cassiopeia II

427	Retirement of purchase debt				\$45,000
428	Completion of refit and upgrades				\$30,000
429	Operation of vessel for six months				\$25,000
					\$100,000

THE CASSIOPEIA SCHOONER PROJECT

Thank you very much for your interest in this project. I believe it is an idea whose time has come. Connecting the timeless art of sea travel to today's times, providing timeless solutions for all time.

Sincerely Harold

Please contact me to discuss your ideas and let me answer any questions you might have.

captain@cassiopeiaschoonerproject.org

Harold Neel 1 512 962 1641