

"Ya Caan Get Theyah From Heyah!"

Fast-Tracking Redevelopment of US Inland and Coastal Marine Packet Freight / Passenger Services



Presented to: ASME, IMarEST, SMPE, SNAME

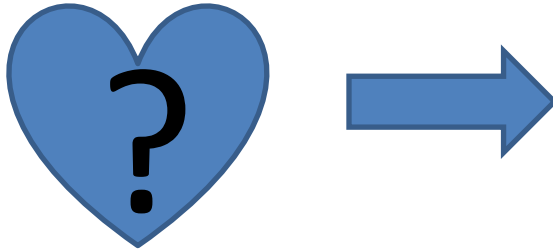


By

TransTech / ShipShares LLC

25 January 2024

Acknowledgements



The author thanks **MANY** colleagues, friends, partners who contributed to this paper in mind, spirit, body: Mark Donahue, Joe Eckhardt, Sven Etzelsberger, Roland Jones, Robert Kelly, Michael Martin, Angus Mccamy, Brad Sokol, Christina Sun, Decklyn Uttmark , Andrew Wilner, Gregg Zuman, others.

Any errors of omission or commission are solely the author's.

Part 1:

What is Packet Service

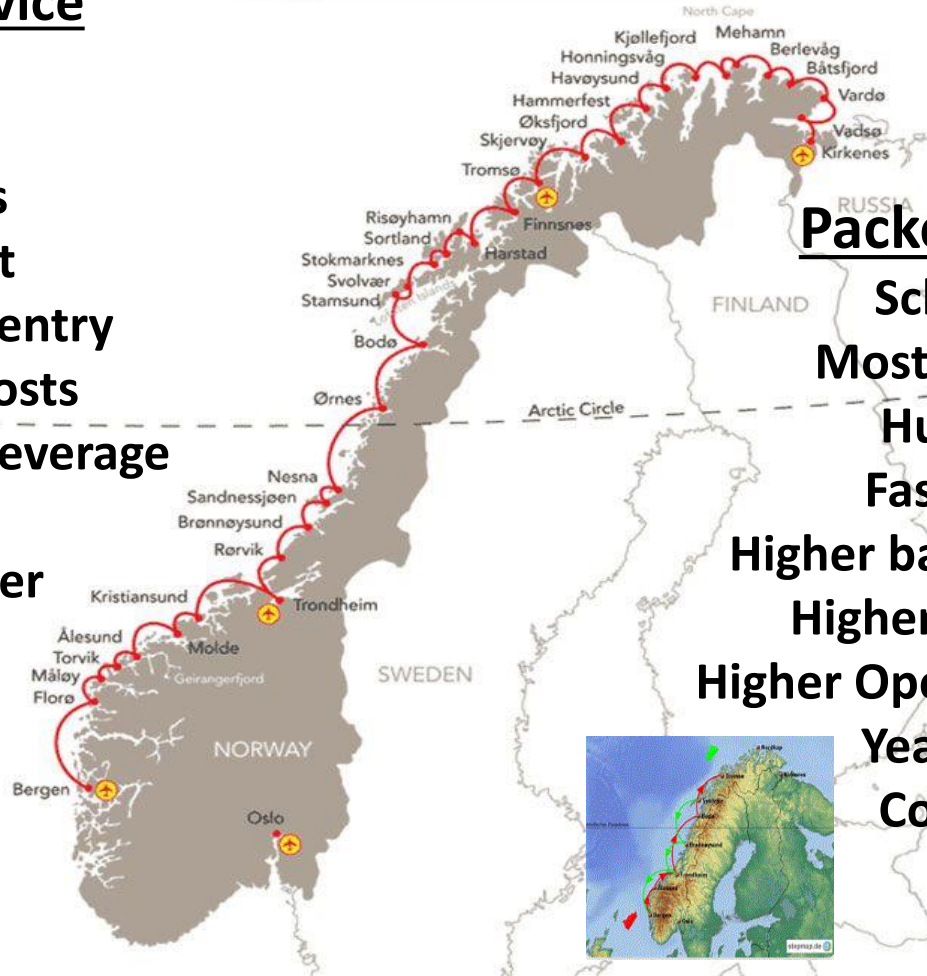


Milk Run Service

- Irregular
- Breakbulk
- Multi-ports
- Slow Transit
- Low barriers to entry
- Lower Fixed Costs
- Lower Operating Leverage
- Seasonal
- Owner-Master

Packet Service

- Scheduled
- Mostly Unitized
- Hub Ports
- Fast Transit
- Higher barriers to entry
- Higher Fixed costs
- Higher Operating Leverage
- Year-Round
- Corporate



“Sic Parvis Magna”

Tonight we walk. Tomorrow we sprint ...

DUV is the “Holy Grail”

TT/SS design ...

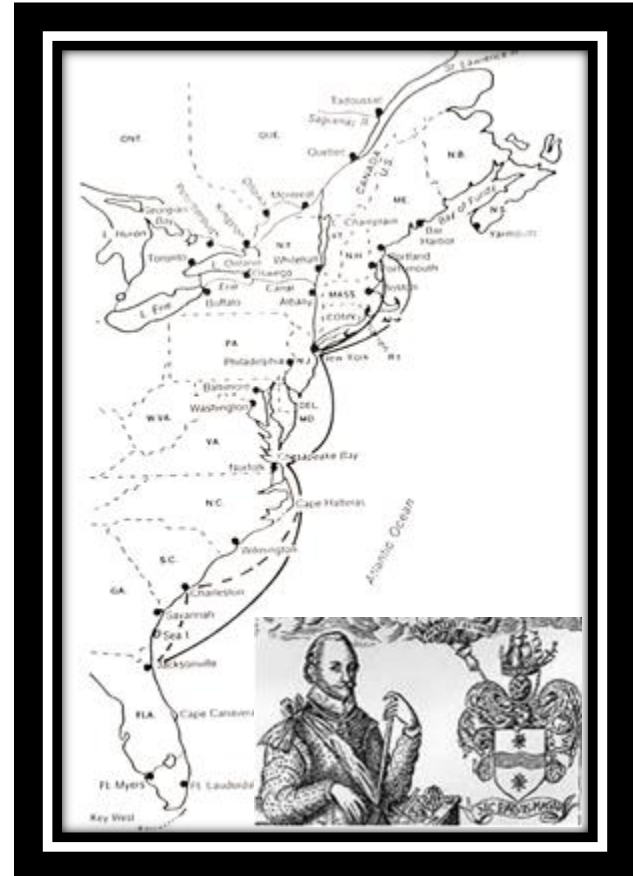
**50 % cheaper than equivalent tonnage for
US commercial operator**

**50% faster than conventional tonnage for
US military sealift needs**

**Build 40 DUVs, 10 per US coast to revive
US commercial shipbuilding**

**Restore US “lower 48” coastwise packet
trades on all four US coasts**

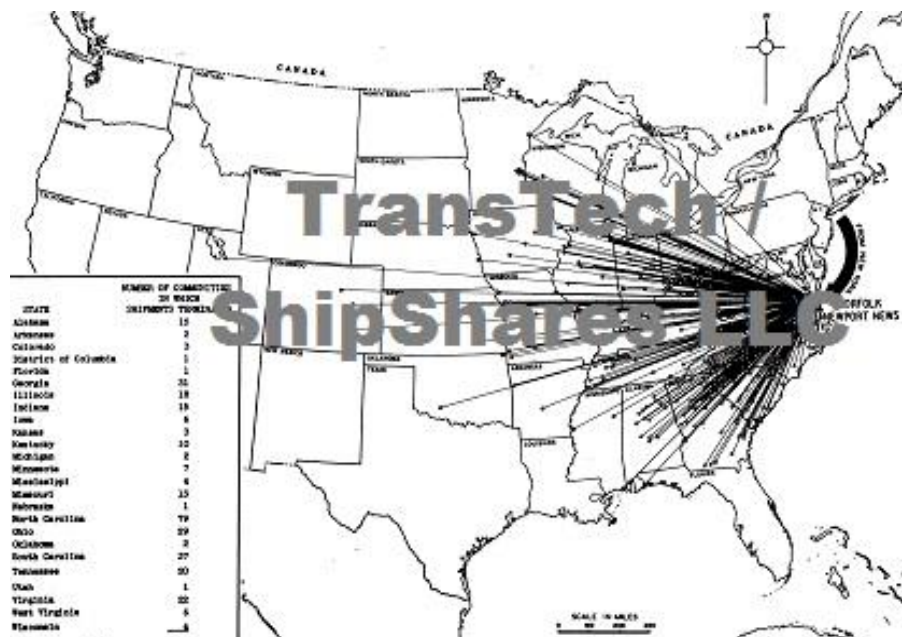
**Needs patent. Hopefully a future SNAME
paper, not tonight.**



Past US Inland / Coastal Shipping

31 Operators in NYC / Albany Service, 7 publicly owned. (HRMM)

Geographic reach and economic impact of coastal shipping was gigantic. Ships competed / cooperated with railroads, interline agreements were common.



Numerous arguments can be made to revive marine inland and coastal routes. However, sustainability is achieved through economic viability, not episodic events or sentimentality.




Investigations have been sponsored by industry and academia ...

FedFerry

Final Report

- ♦ Pier - to - Pier Ferry Cash Cost
- ♦ Sensitivity Analysis
- ♦ Pro forma Agreement bt. FedEx and Operator
- ♦ Alternative Vessel Employment Opportunities
- ♦ Future Action Plan

By

 **TransTech Marine Co.**

11 December 2002

Green Ferry Design & Pro Forma Economic Study

Prepared for

Center for Economic and Environmental
Partnership, Inc.

Prepared by

TransTech Marine Co.

July 2006

... and quasi-government public and NFP organizations, but tangible results have been meagre.

NYSERDA Agreement #25543

Eriemax:

**Assessment of Green Ship Technologies and
Plan for Deployment on the Erie Canal / NYS
Barge Canal System**



Prepared for

**New York State Energy Research
& Development Authority**

Prepared by



TransTech Marine Co.

Brooklyn, NY
Geoff Uttmark MM, MSc, BSc
Principal Investigator

April 2015

***Financing and
Building “Future
Proof” ships for the
Hudson, The Canals,
the Harbor, and
New York’s Coasts***

**Patient Capital, Investment Crowd
Funding, Ship Shares, and
Community/Co-op Shipping and Ship
Building**




Presenters:

**Geoff Uttmark, [TransTech / ShipShares LLC](#)
Andrew Willner, [The Center for Post Carbon Logistics](#)**

Q. So what is different now?

A. Federal, State, NYC Interest...

USMH




Not RealisticNot RecommendedNot Resilient

Marine Bluways

A USMH FY2023 Grant Application to Acquire One (Ultimately Three) Erie Canal-Capable Microship for Re-establishment of Two Protected Waters: USMH Routes (M-87 & M-95) and to Lay the Foundation for Re-Development of US Deep Sea USMH Routes on All US Sea Coasts

Submitted to
**US Department of Transportation
Maritime Administration**


By
 **TransTech / Shipshares LLC**


28 April 2023

1

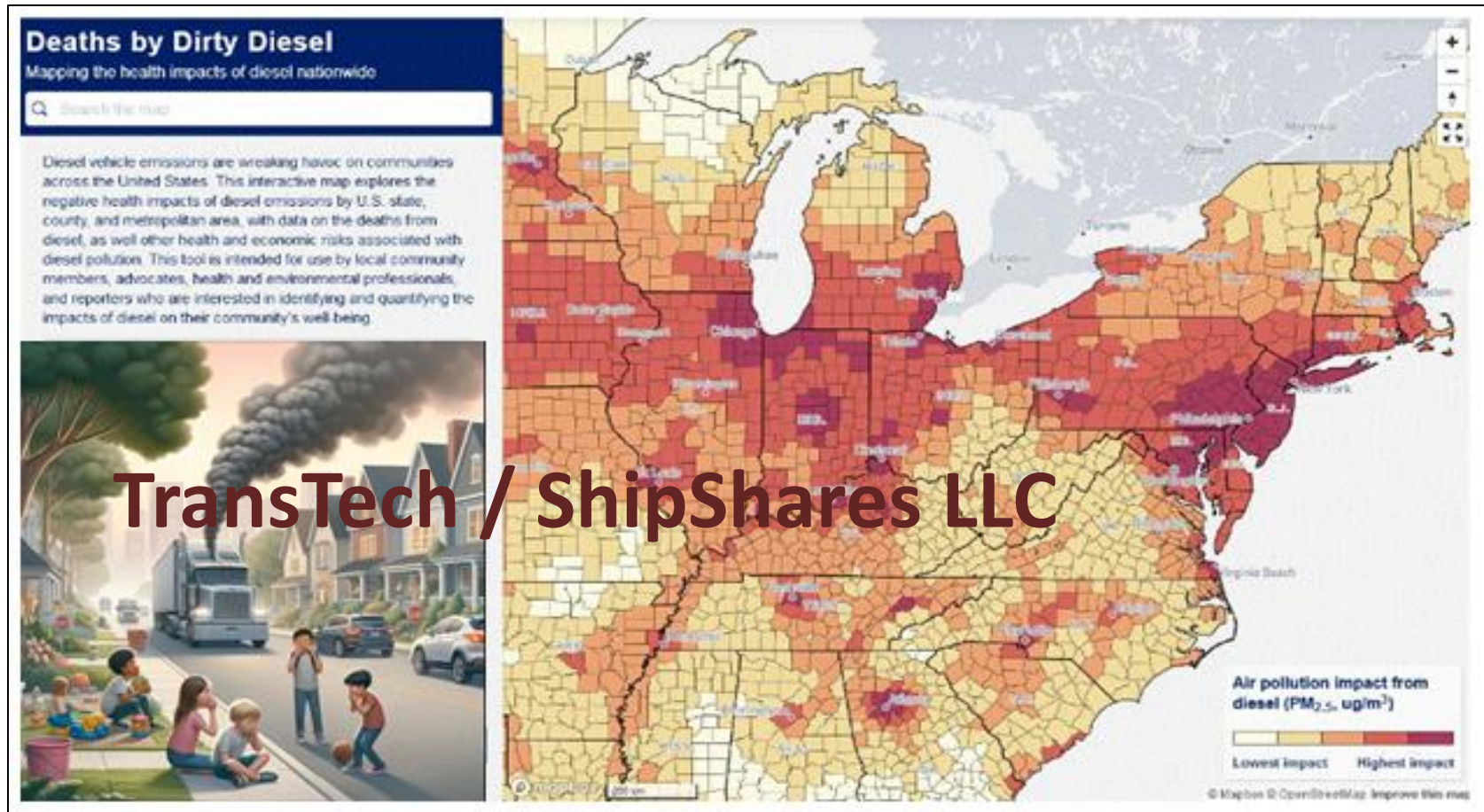
2023

NYC Blue Highways RFEI





Why there is interest now: NYC has never been in compliance with EPA clean air standards, Global warming, peak oil, noise, fourth transport mode ... all are valid.

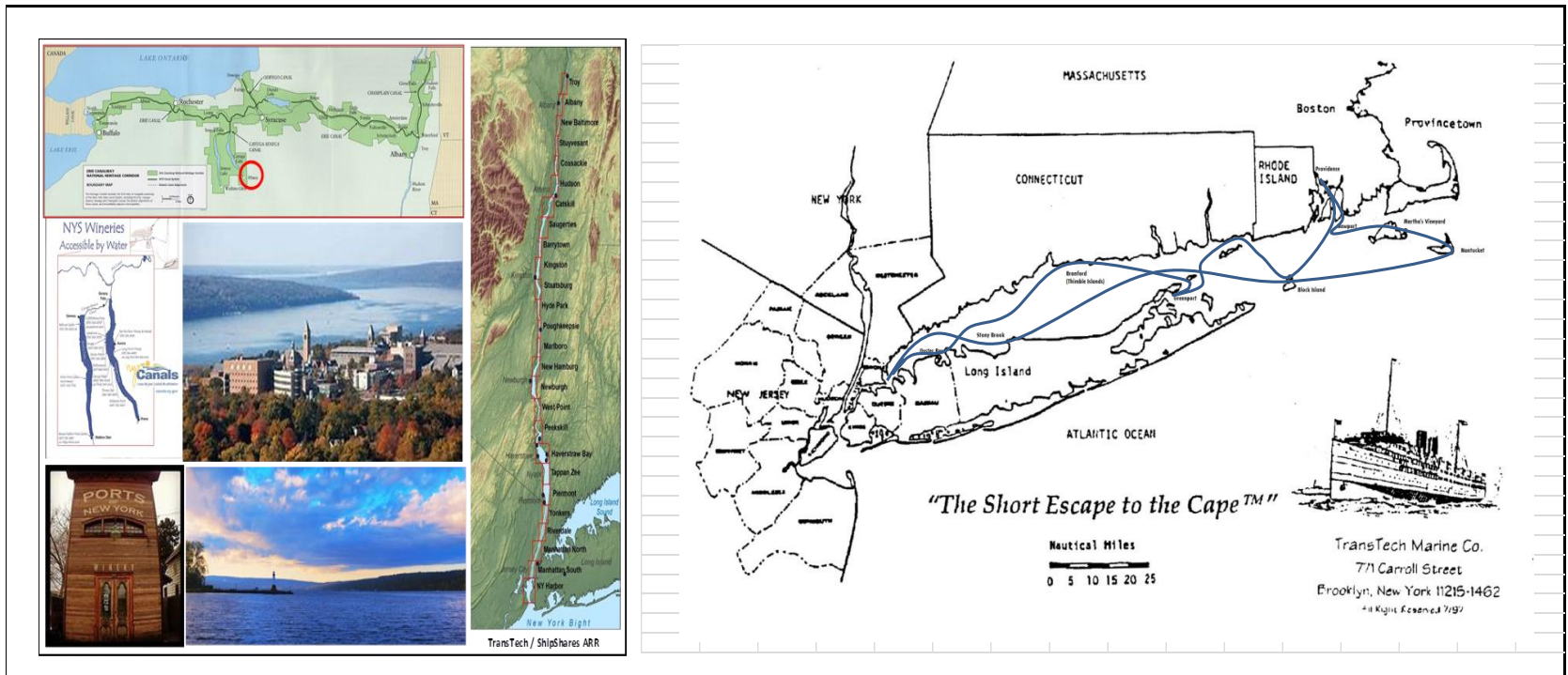


Part 2: The Project

Marine Bluways Corp. is created by TransTech / ShipShares to Reestablish two US coastal and inland marine packet services

HEFTTCo

Short Escape to the Cape™



HEFTTCo

Hudson-Erie Freight Trade & Transport Co.

Refit, Repurpose, Re-employ, Repower
Hudson-Erie Freight Trade & Transport Co.



HEFTTCo. Ports & Distances

Northbound Service		Southbound Service	
NYC – Kingston	78	Ithaca – Three Rivers	76
Kingston – Waterford	62	Three Rivers – Little Falls	80
Waterford – Little Falls	79	Little Falls – Waterford	79
Little Falls – Three Rivers	80	Waterford – Hudson	36
Three Rivers – Seneca Falls	42	Hudson – Kingston	25
Seneca Falls – Ithaca*	34	Kingston – NYC*	78
	375		375

NYC - Ithaca, NY
(Ithaca Odyssey)



Ithaca Odyssey service will operate NYC – Ithaca, NY and ports between.

Initial service will operate NYC – Troy, NY and ports between.

Courses being considered:

1. Passenger / freight service
2. Freight / passenger service
3. Freight only service

Market: The Cargoes

New York State is Third Largest Wine Producer in the US

Base cargo is wine & spirits. Expand to maple syrup, honey, jams and jellies, dried fruits, cheeses, boutique grains, other long-lived foodstuffs that gain cachet from *green* marine transport. With fleet expansion will come higher service frequency and lower unit throughput costs, enabling efficient transport of perishables and lower value goods.



Candidate Vessels for Two Philosophies:

1. Convert Microship to Passenger / Freight Packet



2. Stretch Cargo Ferry to Freight / Passenger Packet

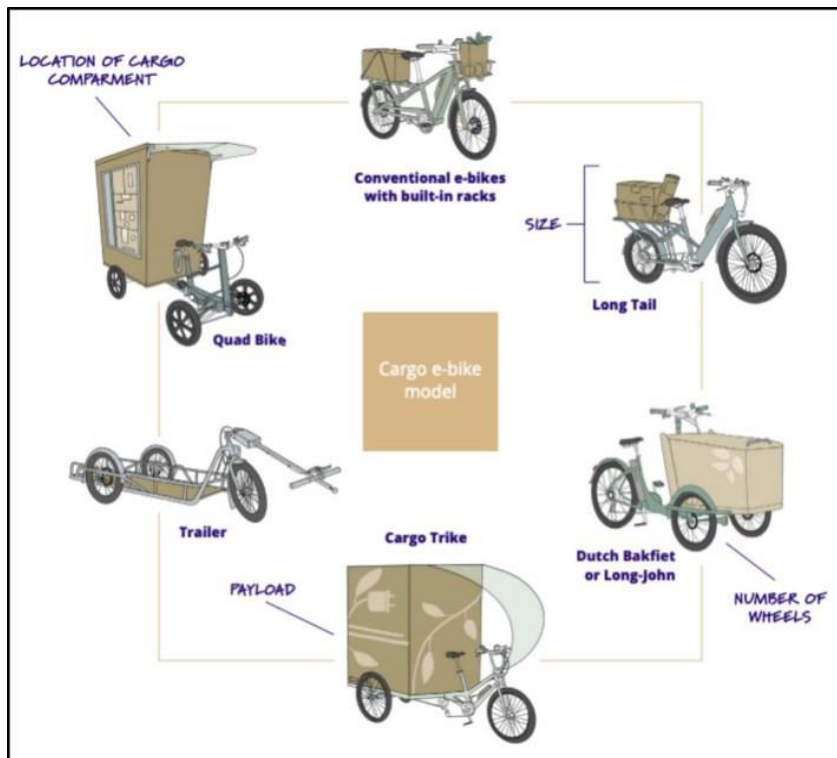


Selection Priority: 1. Repurpose existing tonnage, 2. Convert existing tonnage, 3. Adapt / Build existing design, 4. New Design / Newbuild

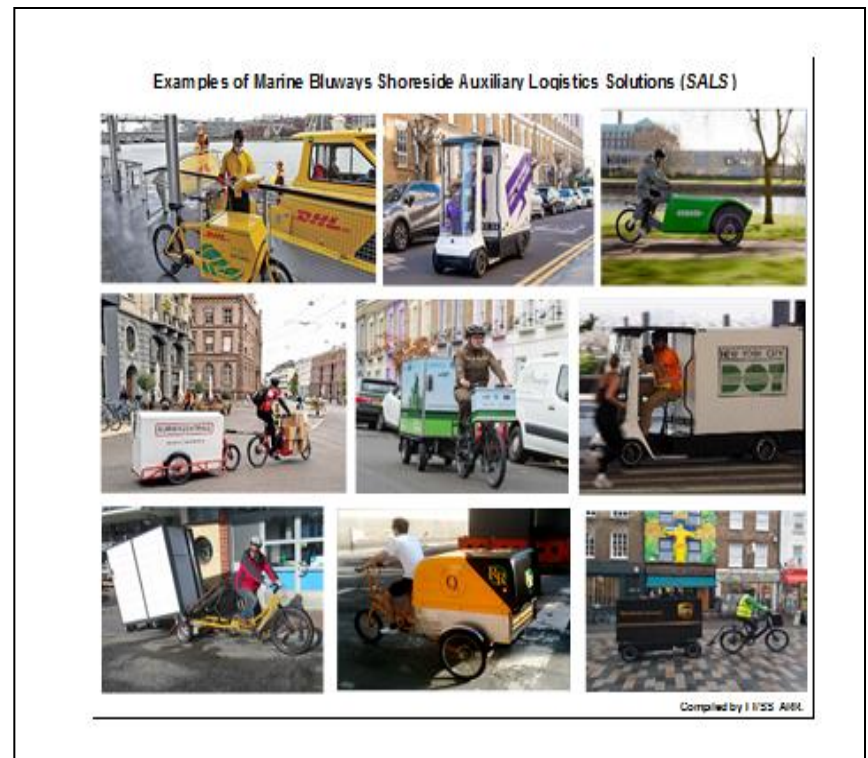
Cargo Handling:

All-Wheeled Cargo Bikes / Trikes Roll-on / Roll-off Operation

Numerous Equipment Providers



Numerous Delivery Service Providers



Grandma's Schwinn with a Basket is 20th C! URB-E 750 Can Pull Twin 750 lb. Trailers NYC is a C40 City



MBC's Business Model is Lessor Owns the Ship, Leases to Operator, Freight Containers Owned by Shippers, First / Last-Mile is Contracted to PUD Service Partners

Farmers turn shipowners to create new demand



'Cornouailles' joins the cauliflower run

IT IS JUST over four years ago that a group of Breton farmers got together to find a way of transporting their produce to the UK faster and cheaper. This was the beginning of Brittany Ferries. Previously Breton produce had been transported several hundred miles by land to the traditional cross-Channel ports of France and then across to the UK, the produce (mainly cauliflowers and other vegetables) often arriving in poor condition. It was then that the farmers decided to do something themselves; they built their own port at Roscoff and sent out tenders for a year-round shipping service. But nobody took up the offer so the French farmers decided to set up their own service and launched Brittany Ferries. The major shareholder in Brittany Ferries parent company, BAF, is the Comité Economique de Fruits et Légumes de Bretagne.

PRINCIPAL PARTICULARS	
'Cornouailles'	
Passenger/cargo ferry	
Yard No. 733	
Trendhjem Msk Verkeid, Norway	
Brittany Ferries, France	
Length oa	106.70m
Length b.p.	98.00m
Breadth mid	18.50m
Depth to upperdeck	10.65m
Depth to main deck	5.25m
Draught max. scantlings	5.20m
Draught as a passenger ship	4.90m
Main propulsion system	2 x m. Doude-Pielock 16PAGV diesels, each rated 3 5000bhp
Service speed	19 knots
Capacity	300 passengers and 300 cars

Lloyd's List, C. 1978, TT/SS archives ARR

Part 3: Hull Engineering

Microship Main Particulars

Principal Dimensions

Length:

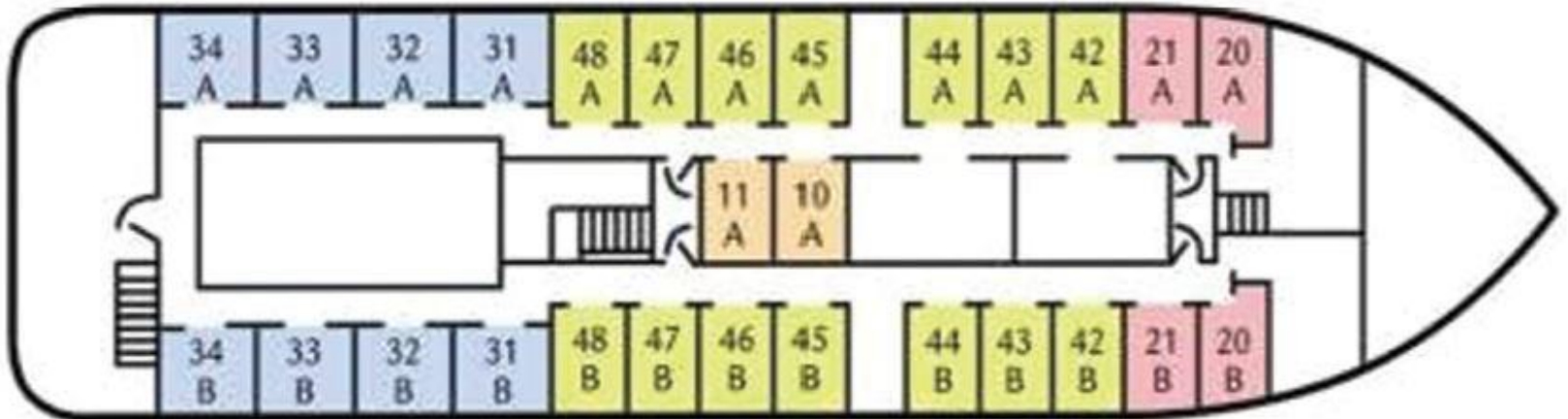
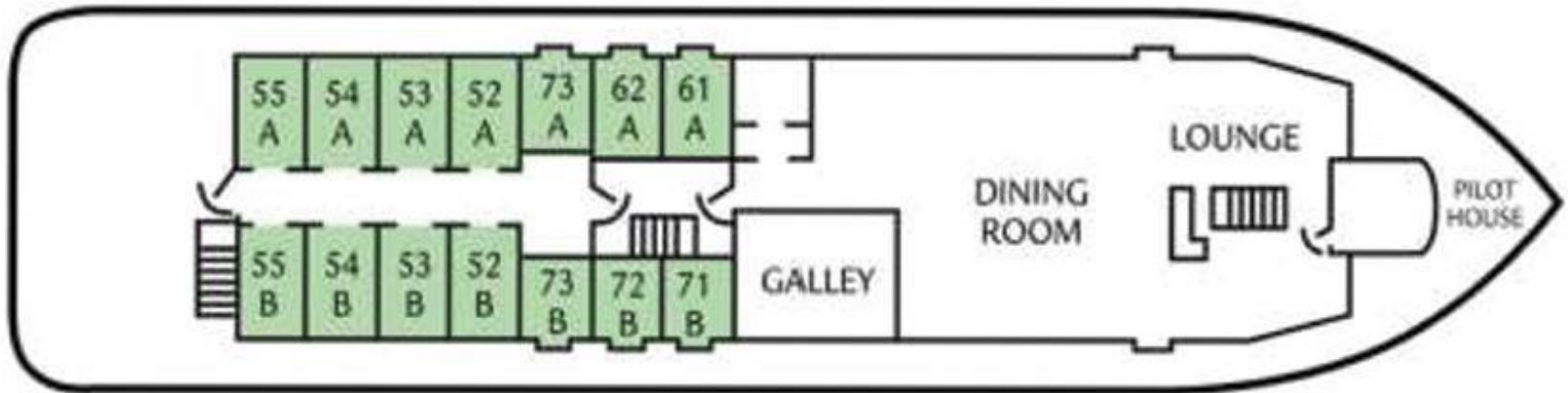
L.O.A.	177' - 3"
L.W.L.	137.80"

Beam: (Extreme)	40'
Beam (molded)	39' - 2"
Designed Draft:	6' - 3"
Depth (Molded):	9'

Gross Regulatory Tons:	99
Gross Tons (ITC):	667
Net Regulatory Tons:	67
Net Tons (ITC);	283
Light Ship Displacement:	335.51 Long tons

Passenger Capacity:	76
Passenger Cabins:	42
Crew Accommodations:	2 ea (6 person cabin), 1 ea (2 person cabin), 1 ea (1 person cabin)

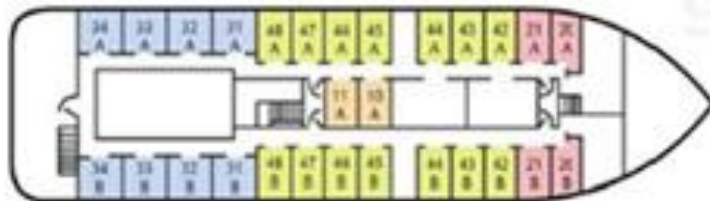
Microship Deck Arrangements Pre-Partial Conversion



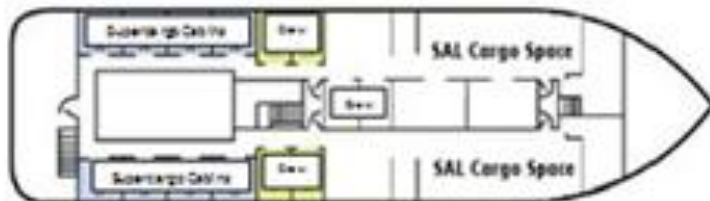
Repurpose by Converting Lower Deck into Ro-Ro Garage Cargo Space

“Micromobility Just Became America’s Hottest Growth Industry.”

Niagara Prince Lower Deck Before Conversion



Niagara Prince Lower Deck After Conversion



Convert lower deck to cargo garage space and supercargo dorm.

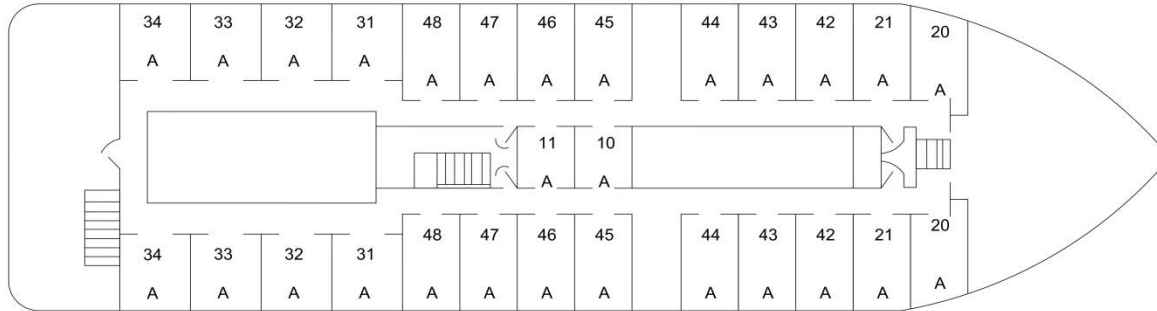
SALs (Shoreside Auxiliary Logistics vehicles) are human and electric-powered PUD conveyances.

Examples of Shoreside Auxiliary Logistics Solutions (SALS)

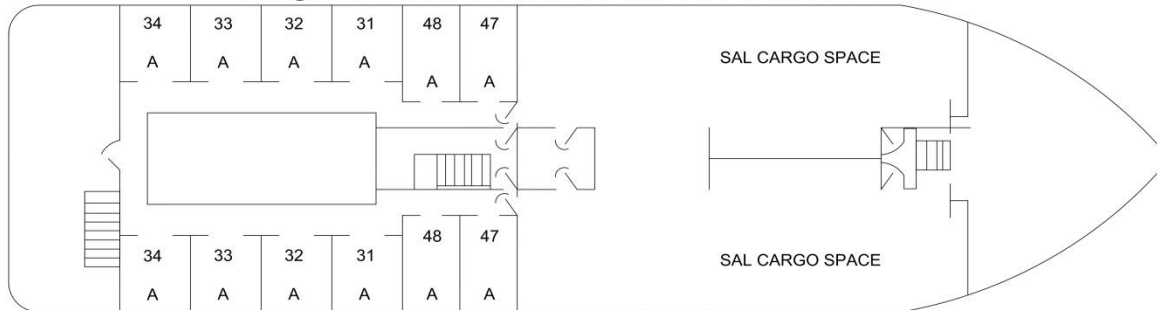


Hull Engineering: Microship Lower Deck Arrangement Post-Partial Conversion

Niagara Prince Lower Deck Before Conversion



Niagara Prince Lower Deck After Conversion



REVISIONS

1	UPDATE CARGO SPACE
---	--------------------

**TransTech Marine Co.
ShipShares LLC**
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geoff6392@shipshares.com
771 Carroll St, Brooklyn, NY, 11215
Shipshares.com

NIAGARA PRINCE

FOR:

TITLE:
LOWER DECK CONVERSION

DATE:
12/01/2023

SHEET:
1

VERSION:
2



SIZE:
ANSI-C

SCALE:
N/A

AUTHOR:
-

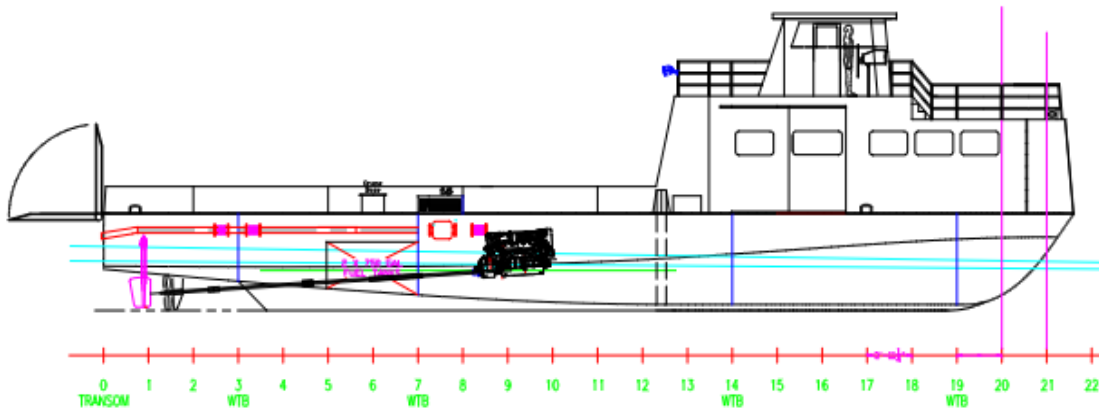
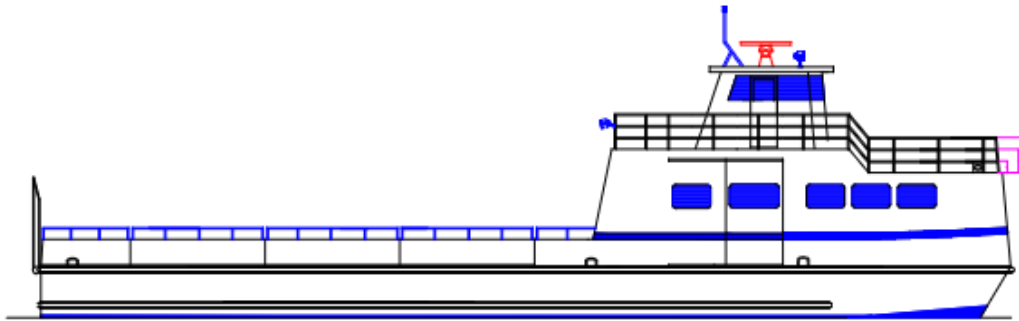
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Hull Engineering: Microship Outboard Profile Post-Partial Conversion Showing Enlarged Sliding Cargo Door

	<p>REVISIONS</p>
	<p>TransTech Marine Co. ShipShares LLC</p> <p>347-912-4327 gen@ts22@shipshares.com 771 Canal St, Brooklyn, NY, 11215 ShipShares.com</p>
<p> This design is eligible for <i>Marine-Lease</i> financing to qualified vessel operators.</p>	
FORM:	
TITLE: LOWER DECK CONVERSION	
DATE: 12/18/2023	SHEET: 1
VERSION: 1	SIZE: ANSI-C
SCALE: N/A	AUTHOR: -
<p>© 2023 TransTech Marine Co. / ShipShares LLC. All rights reserved. This drawing is the property of TransTech Marine Co. / ShipShares LLC. It is to be used only for the project and vessel identified herein. No part of this drawing may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written permission of TransTech Marine Co. / ShipShares LLC.</p>	

Hull + Mach'y Engineering:

Cargo Ferry Pre-Upgrade to: 1. Add 20' mid-body, 2. Increase CDWT to 100,000 lbs.,
3. Increase pax capacity, 4. Convert to DE HMP (eventually FC HMP)



Principal Dimensions

LOA	85ft
Beam (molded)	23ft-6in
Beam (extreme)	24ft
Depth (mid-ship)	8ft-4in
Lightship draft	4ft
Pax	12people

Part 4: Propulsion

Some Marine Bluways Comments on Propulsion

MBC is committed to achieving high ESG ratings from the beginning. Practical realities attached to any new enterprise might call for starting out with conventional machinery. If that is the case, it will be clean diesel running on bio-fuels. This will not alter MBCs commitment to operating the cleanest marine packet service ever seen on the Hudson River.

**The progression is: diesel – clean diesel – DE / Battery HMP – FC / Battery HMP
TransTech / ShipShares was fortunate to receive sponsorship from FedEx to examine this issue and our findings were that changeover to electric propulsion for inland vessels will occur within one ship replacement cycle given a strong market leader. MBC intends to find and align with that leader or be that leader.**

Why Electric Propulsion in the First Place?

Maritime electric faces the same challenges (lack of infrastructure, and even less standardization) as vehicular electric with minuscule scale so why do it?

The short answer is WE SHOULD: reduce GHGs, smog, marine noise, etc.

The longer answer is WE CAN: replace diesels with smaller, more efficient and reliable electric motors, battery technologies enable, electric drive calls for better hull and propeller design, redundancy is easier, hybrid systems enable hedging and incremental changeover.

We should be the best engineers we are capable of being today. And there is essential role to be played by government to accelerate changeover tomorrow by helping alleviate cost differentials between mature technologies and new ones.

MBC can accelerate changeover by building a Dunkirk-size fleet of vessels on a high-profile market to standardize marine electric propulsion systems, build up required infrastructure while driving down costs.

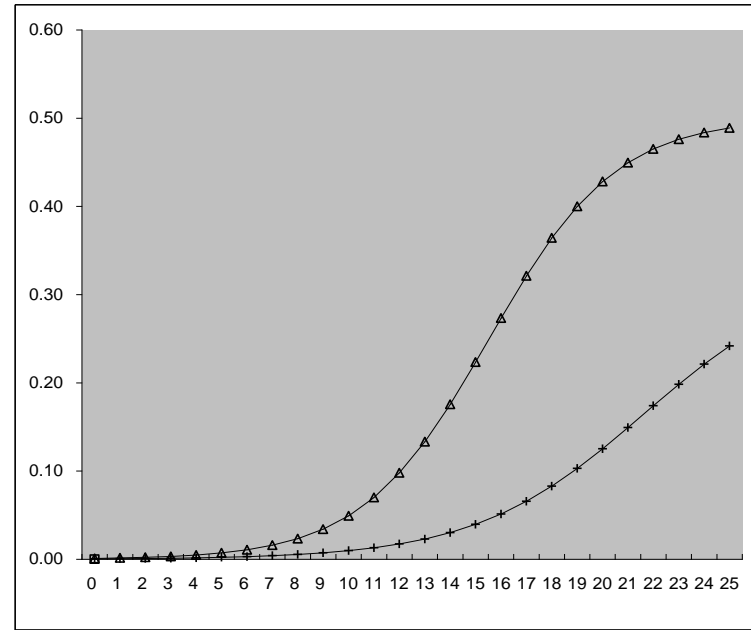
Strong Market Leadership Accelerates Change

PROJECTED CONVERSION OF US FERRY MARKET TO GREEN PROPULSION Conventional Diesel - Clean Diesel - Hybrid D / E - Fuel Cell Electric

Societal Regulations / Incentives:	Moderate	Aggressive
Present Market Penetration:	0%	0%
Projected Penetration:	33%	50%
Growth Constant:	30%	40%

Market Penetration as Function of Time:

Time Years	FedEx "Motor Coaster" Rapid Penetration	Non-FedEx Leadership Slower Penetration	Market Penetration (Pct.)
0	0.001	0.001	
1	0.001	0.001	
2	0.001	0.002	
3	0.001	0.003	
4	0.002	0.005	
5	0.002	0.007	
6	0.003	0.011	
7	0.004	0.016	
8	0.005	0.023	
9	0.007	0.034	
10	0.010	0.049	
11	0.013	0.070	
12	0.017	0.098	
13	0.023	0.133	
14	0.030	0.176	
15	0.040	0.224	
16	0.051	0.273	
17	0.066	0.321	
18	0.083	0.364	
19	0.103	0.400	
20	0.125	0.428	
21	0.149	0.450	
22	0.174	0.465	
23	0.198	0.476	
24	0.221	0.484	
25	0.242	0.489	

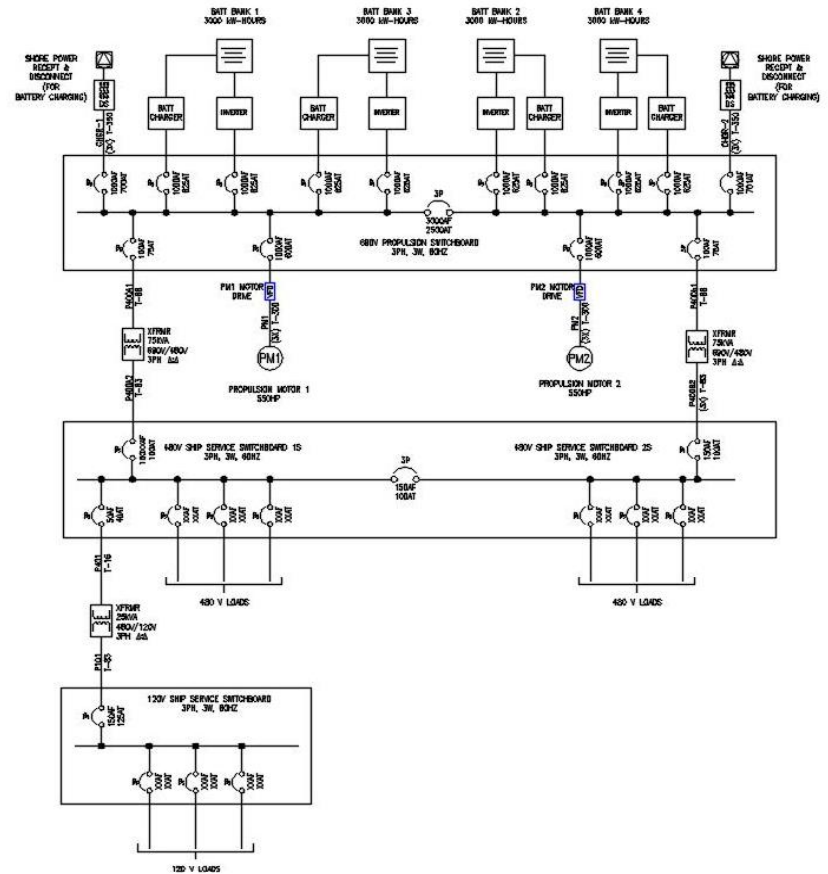


Year

TTMC Jan 2007

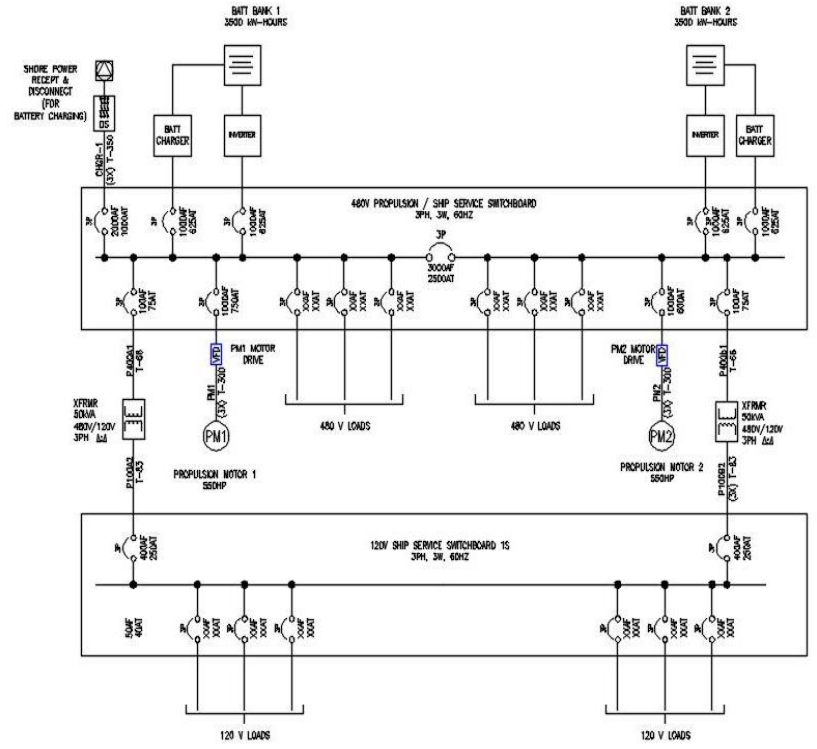
Mach'y Engineering Today-1: Greener Microship repowered with DE / Battery HMP

Micro Cruise Ship				
	KW	time (hr)	KW-Hr	
Maneuvering	600.00	0.25	150.00	
Cruise @ 12.5 knots – 160kW	1100.00	12.00	13200.00	
Maneuvering	600.00	0.25	150.00	
Ship Service loads	90.00	12.50	1125.00	
	2390.000	one way trip	14625.00	
		10 % margin	16087.5	
		60% discharge	26812.5	
	Recharge KW Required (12 hrs)		1340.63	
	1-Stop Assume 690 V (with transformer)			



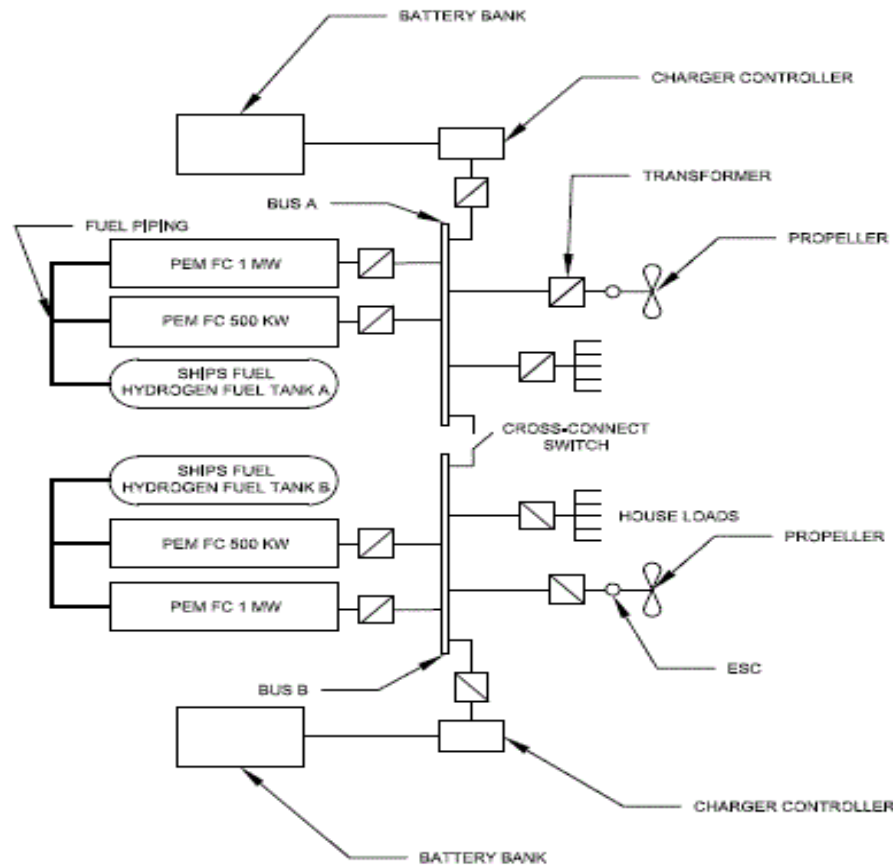
Mach'y Engineering Today-2: Greener Stretched Cargo Ferry repowered with DE / Battery HMP

Stretched Cargo Ferry			
	KW	time (hr)	KW-Hr
Maneuvering	600.00	1.00	600.00
Cruise @ 12.5 knots – 160kW	400.00	12.00	4800.00
Maneuvering	600.00	1.00	600.00
Ship Service loads	50.00	12.50	625.00
One way trip			6625.00
10 % Margin			7287.5
60% Discharge			12145.83
Assuming 2 stops			6072.92
Recharge KW Required (6 hrs)			607.29
2 stops Assume 480'			



Mach'y Engineering Tomorrow:

All candidates to eventually be powered by greenest propulsion technology available ... hybrid / fuel-cell electric.



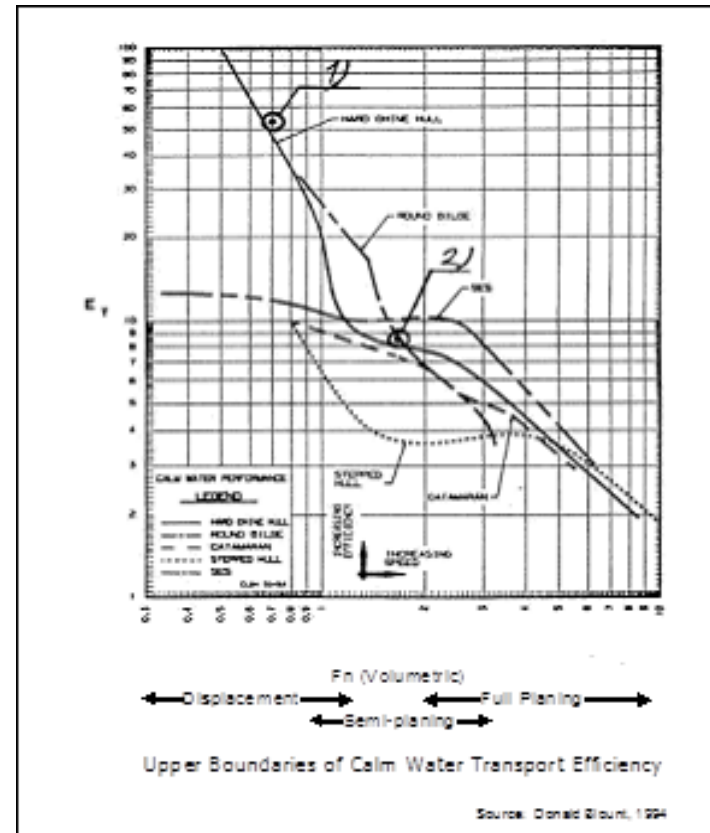
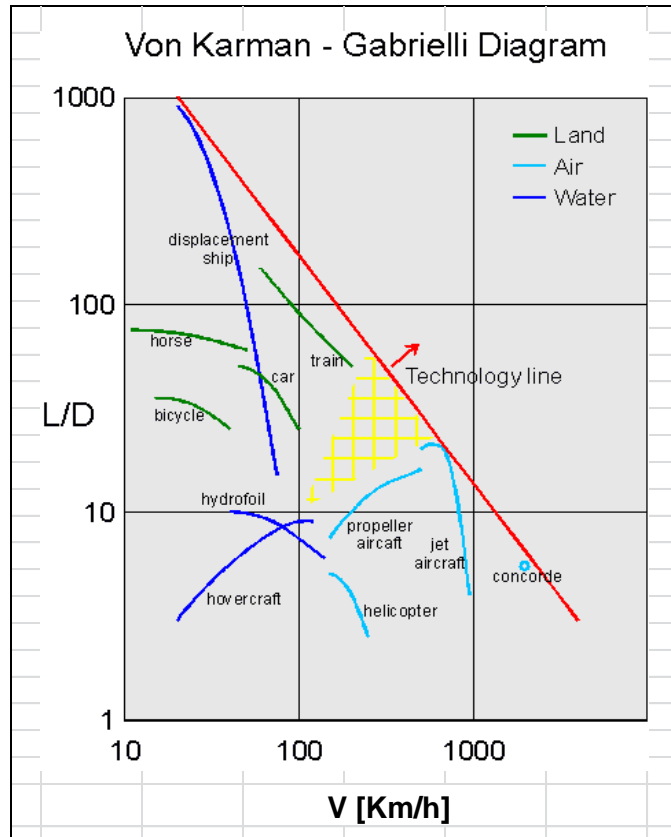
○	Electronic Speed Controller
◻	Transformer

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Hudson-Erle Freight Trade & Transport Co. (HEFTTCO)	
FOR: NEWCO.	
TITLE: <i>Niagra Prince Fuel Cell Powering Arrangement</i>	
DATE: December 2021	SHEET:
VERSION: Prelim	SIZE:
SCALE: NA	AUTHOR: Decklyn Uttmark (Webb Institute)
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These Two Graphs Say The Same Thing:

Von Karman-Gabrielli is General Case (all modes, L/D vs Speed)

The right-hand graph is maritime mode only (TE vs. Fn Vol.)



In Pursuit of Transport Efficiency

TransTech Database of Small Power Vessels to 200' LOA

Name	Type	LOA	LWL	Beam	Draft	Light Ship	Full Load Disp.	LB ratio	DL ratio	Service Speed	SL ratio	FN (speed)	FN (Vol.)	Total HP	HP / LT	Lbs./ HP	Power Factor	Speed Factor	Transport Efficiency	Total Eng.
<i>America</i>	Frt. Ferry	85.0	78.0	24.0	4.0		120.0	3.25	253	14.0	1.59	0.47	1.04	800	6.7	336	1.2	5.5	14.4	2
<i>Niagara Prince</i>	Cruise	177.5	160.0	39.0	7.5		802.3	4.10	196	10.5	0.83	0.25	0.57	1100	1.4	1634	0.2	3.0	52.7	2

Name	Full Load Disp.	Service Speed	SL ratio	FN (Vol.)	Transport Efficiency
<i>America</i>	120.0	14.0	1.59	1.04	14.4
<i>Niagara Prince</i>	802.3	10.5	0.83	0.57	52.7

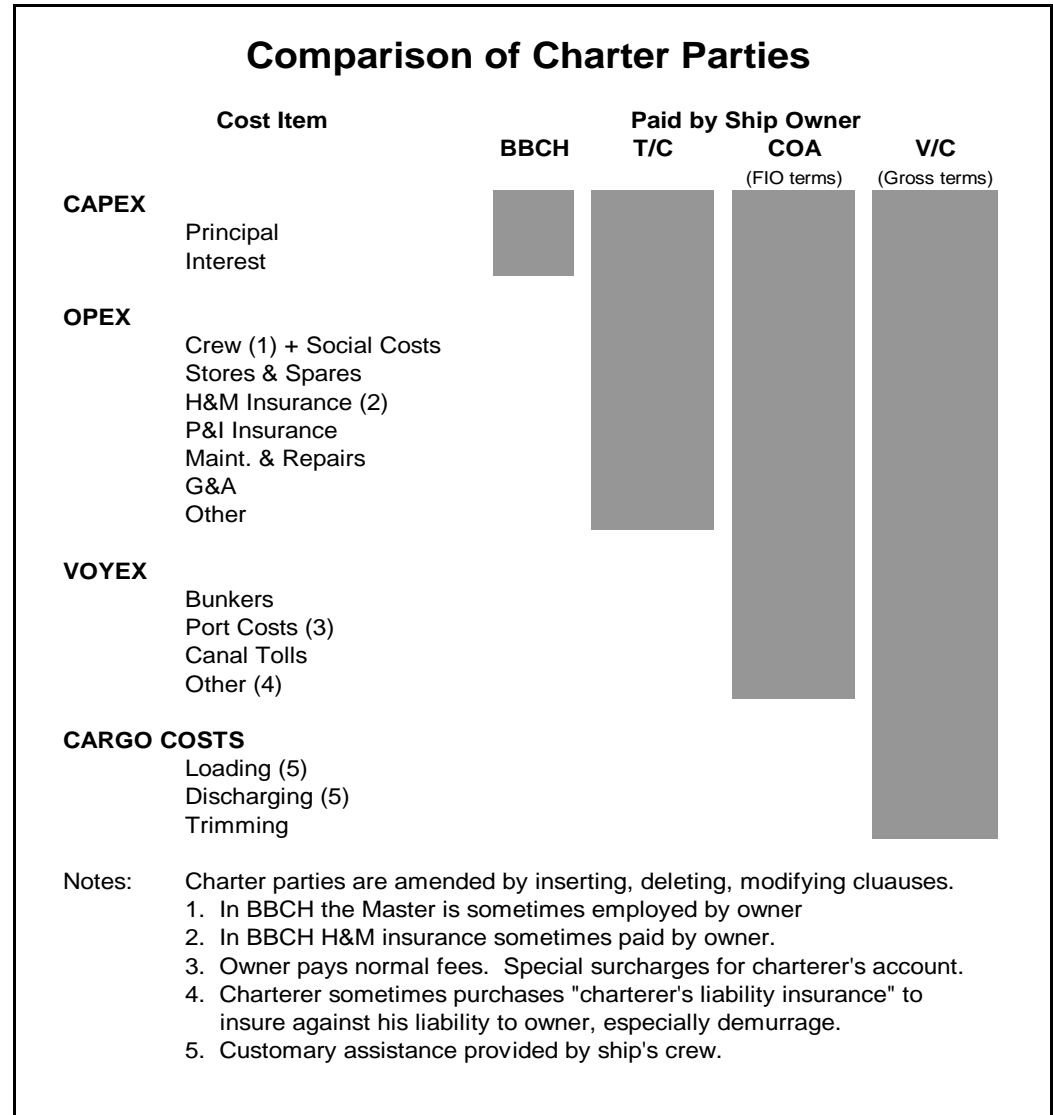
Part 5: Proforma Financial Statements

Economic performance of marine transport systems is highly dependent on which parties pay which costs.

USA has the world's best ship finance program which can lower CAPEX. Jones Act requires ships for domestic trades to be built in US.

Manage OPEX via flexible work rules, profit-sharing.

Minimize VOYEX via speed management, avoidance of HMT, federal / state / city to provide docking infrastructure.



Example of Packet Service *Financial* Return

TransTech / ShipShares LLC Shipping Investment Planning System

Niagara Prince in Pendulum Freight / Pax. Service (NYC-Troy-NYC-Greenport-NYC)
(25 annual pendulum circuits @ 4 legs per circuit = 100 cruise legs per annum)

Units = USD/000 0.025 CAPCOST = USD 2.5 M, 10 Yrs, 10.0 pct Tax Rate= 0.250

Year	Net Revenue (1)	OPEX	CAPEX	VOYEX	All Costs	BTCF	Interest Paid	Deprcn. Cost	Taxable Income	Taxes Payable	ATCF
0	0	0	2500	0	2500	2500	0	0	0	0	-2500
1		2295	407	50	2752	-1017	250	250	0	0	-1017
2			407	51	2799	671	234	250	187	47	624
3				53	2847	710	217	250	243	61	649
4					2896	750	198	250	302	75	674
5						791	177	250	364	91	700
6							154	250	429	107	726
7	3926							250	498	124	752
8	4024	2636							571	143	779
9	4125	2689	407							162	806
10	4228	2743	407	62							834
11	4334	2798	0	64	2862						
12	4442	2854	0	66	2919	1523					
13	4553	2911	0	67	2978	1575	0				
14	4667	2969	0	69	3038	1629	0	0	1629		
15	4784	3028	0	71	3099	1685	0	0	1685	421	

Proprietary / Illustrative only

Project NPV = **\$1,831** for years 0 - 15 Project IRR = **17.4%** for years 0 - 15

Notes: 1. Net Revenue = Gross Revenue - 2 percent.

2 Year 1 Net Revenue is reduced by 50 percent to reflect time to build the trade and passenger base.

TT/SS Oct 2023 ARR

Part 6: Capitalization

A New Financial Instrument is Proposed ...

ELCE (Pronounced “Elsie”)

ESOP-Linked Convertible Equity

- Patient VC willing to exchange high financial returns for social benefits **BUT** still expects to become liquid in time.
- New investors enter into ESOP (employee stock ownership plan) to enable control of the new venture to revert to its founders and employees via share repurchase agreement.
- New investors retain some minority interest in the venture as compensation and to help guide future growth.

But First ... Why not traditional capitalism?

Traditional Capitalism ...

- Was originally community based.
- Did indeed launch many successful Hudson River Packets
- Has evolved to suit the needs of large VC firms.
- Is mainly profit-driven.
- Requires rapid expansion to achieve target returns.
- Does not specifically incorporate ESG metrics.



ELCE¹ is Capitalism that Imparts Equal Status to ESG² Ratings and More Conventional Metrics³



1. ELCE = ESOP-Linked Convertible Equity, 2. ESG = Environmental, Social, Governance metrics
3. Traditional metrics = NPV, IRR, ROE, ROCE, Payback Period, etc.

Observations About ELCE Returns...

- Financial returns are present but not stellar, not particularly attractive to traditional VC.
- Financial returns ARE sufficient to support ELCE primary target of converting initial external invested equity into long term debt.
- ELCE social returns include both real and abstract advantages ...
 - Jobs creation, ripple effect, expand tax base, *green* transportation
 - Higher quality of life, restore packet service, preserve iconic ship(s)
- Scale of the project can support other initiatives ...
 - Expand the core marine transport business
 - Support broader related objectives (*Wellbeing Farm*, etc.)
 - Extend the model to other groups, venues; in other words, literally...

Build a ship and start a movement! SM

Social Capitalism in Various Forms HAS Already Been Used for a Range of Investor Motivations and Anticipated Returns...



- Sunday school children purchased 10 cent shares in missionary schooners.



- Marcus Garvey's UNA founded a steamship company to “return the African diaspora to their ancestral lands.”



- *Greenpeace* International used community shares to build *Rainbow Warrior III*.

A Tale of Two Ships

Tall Ship *Tenacious*



Owner: Jubilee Sailing Trust, UK
Mission: Handicapped-accessible tall ship
Cost: USD 8 M (donated build site + volunteer labor)
Time : 8 years from announcement (1992) to delivery (2000)
Funding: Direct mail + phone + press

Rainbow Warrior III



Owner: Greepeace Intl., Netherlands
Mission: Environmental defense / political activism
Cost: USD 32 M
Time : 3 years from announcement (2008) to delivery (2011)
Funding: Internet crowdfunding

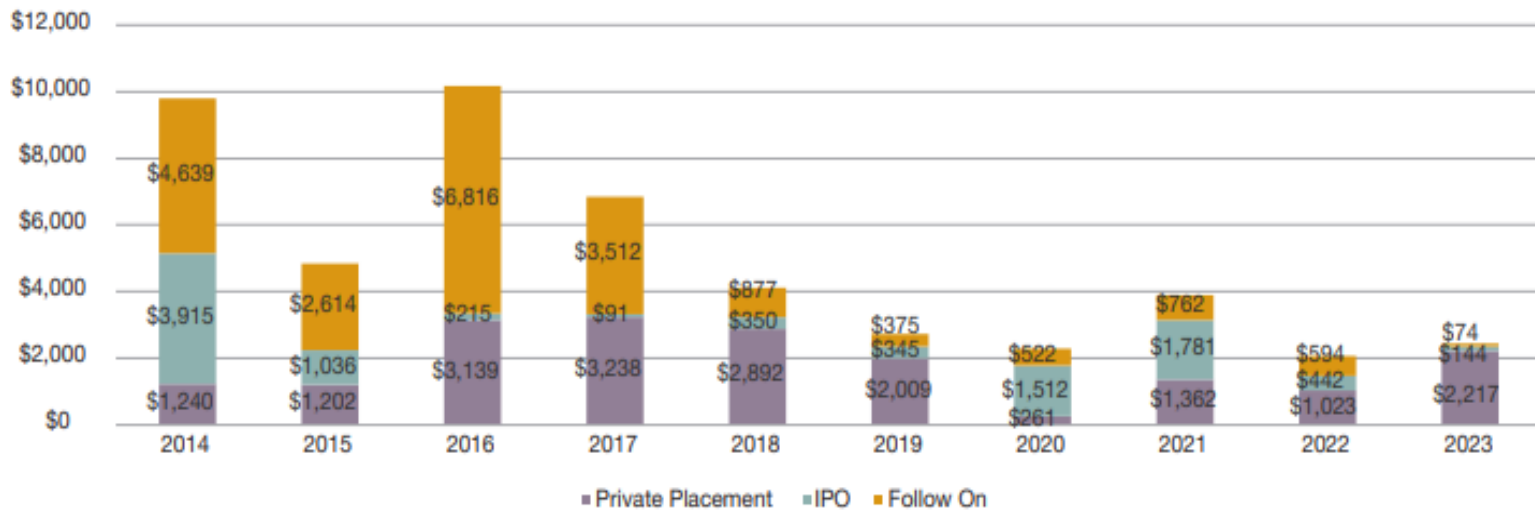
Can We As A Society Afford MBC?

Even in “off” years, global equity markets provide about USD 3 billion to marine shipping, in “good” years it can be USD 10 billion (Source: *Marine Money*). About 40 percent originates in the US, though few commercial ships are built in the US and operated by Americans.

Equity Capital Markets

Equity Capital Market Offerings by Year, 2014 - 2023

(Million US Dollars)



Equity Capital Market Offerings by Year, 2014 - 2023

(Number of Deals)

Can We As A Society Afford NOT To Do MBC?



Innovation Norway offers green shipping funding

04/09/2023

Norway's state innovation agency, Innovation Norway, launched risk-based loans for environmental investments in the country's short-sea shipping sector.

The scheme, which has total funding of NOK470 million (US\$44.1m) for 2023 for risk-based loans for green investments in short-sea shipping, was launched on 31 August. The scheme envisages a maximum loan of NOK10m for each individual customer.

A Norwegian group has been awarded preliminary approval for a H2 Fuel Cell propulsion system



Part 7: Concluding Remarks

Our National Heritage

US Commercial Marine Shipping Leadership

- 1770s *Baltimore Clippers* ... invented by Maryland colonists
 - 1787 *Perserverance* ... John Fitch invents / operates 1st commercial steamboat
 - 1819 *Savannah* ... 1st steam-assisted ship to cross Atlantic Ocean
 - 1850 *Clipper Ships* (true clippers) built for California gold rush in Boston and New York
 - 1890 *Colgate Hoyt* ... 1st whaleback freighter, built in Duluth, Minnesota
 - 1902 *Thomas W. Lawson* ... World's largest sailing vessel, built in Maine
 - 1904 *SS Hennepin* ... 1st self-unloader, built in Buffalo, New York
 - 1931 *SS Seatrain Texas* ... rail cars move more economically by ship, built in Chester, Pennsylvania
 - 1953 *SS United States* ... World's fastest passenger ship built in Newport News, Virginia
 - 1956 *SS Ideal X* ... Malcom McLean converts T-2 tanker into world's first containership
 - 1958 *SS Methane Pioneer* ... World's first LNG carrier built in Louisiana for UK owner
 - 1961 *NS Savannah* ... World's first nuclear-powered merchant ship built in Camden, New Jersey
 - 1969 *TT Manhattan* ... World's first ice-breaker tanker built in Chester, Pennsylvania
 - 1970 *SS Atlantic Forest* ... First LASH built in New Orleans, Louisiana for Norwegian owner
 - 1973 *SS Ponce de Leon* ... US invents ROLOC box, trailerships extend highways to seaways
 - 1975 *Boeing Jetfoil* ... submerged foils, gas turbine, water-jet ferries set speed and comfort standard
 - 1978 *NASA* ... first commercial transport H₂ by sea
- New Leaders Needed !!!***

Compiled by TransTech / ShipShares LLC May 2023

Our Regional Challenge

Los Angeles City Council passed the “Ship It Zero” resolution¹ calling on Walmart, Target, IKEA, Amazon, and other top maritime import polluters to the Port of L.A. to achieve 100% zero-emission shipping in Los Angeles by 2030. The resolution also affirms the council’s support for state legislation and administrative action to rapidly decarbonize the maritime shipping industry and create zero-emission shipping corridors along the U.S. West Coast and across the trans-Pacific trade route.

LA City Record, Nov 10, 2021

Our “America’s Cup” Moment

Vote below for Category III: Electric Boats Paying Passengers



Anditya Solar Ferry » [more info](#)



Brim Explorer » [more info](#)



e-Boucarot » [more info](#)



Ecoline Limousine » [more info](#)



Ellen e-Ferry » [more info](#)



Green City Ferries BB Green 24 » [more info](#)



Honest Eco Dive Boat 'Squid' » [more info](#)



Q-Yachts eLimo » [more info](#)



Riva Vaporetta » [more info](#)



SeaBubbles » [more info](#)



Soel Yachts SoelCat 12 » [more info](#)



Vizianello Thunder Water Limo » [more info](#)

To Learn More, click on *The Captain's Table* and enter PW "hefttco".

Institutional Investors PW to Promenade Deck
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Password: Login

Welcome to TransTech / ShipShares LLC[®]
Build a ship and start a movement!SM



NB ... All graphics on this page are active links.



Link to Network

TransTech / ShipShares coordinate cutting-edge NAME R&D and progressive capital formation to lead *Green Revolutions in the Making and Transformation Through Transportation* in the high-ESG marine shipping space. You have navigated to rich, deep waters that are this site; energetic exploration can realize your community's marine shipping aspirations.

Naval Architecture Concept / Preliminary Design



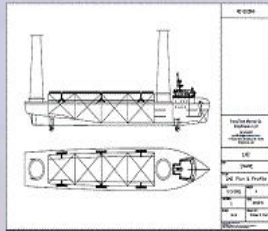
Eriamax RSS 80 (River Sea Ship 80' LOA) is a concept hybrid sail / HMP freight ship design to reinvigorate commercial utilization of the Erie / NYS Barge Canal.

Nav Arch assignments have ranged from design of a shoal-draft skow schooner to computing dimensions, form coefficients, propulsion analysis, weights and and RET cost estimate of a prototype 400,000 DWT Chinamax ULBC.

Click [here](#) to view more assignments and [here](#) to learn how we start the ship design spiral.



Marine Engineering R & D



TransTech R&D on VGER, an improved Flettner Rotor, began in 2005. This *green* propulsion device can substitute as much as 60 percent of ME thrust in some conditions. Five companies now manufacture ship propulsion rotors.

Other initiatives center on hybrid approaches that combine electric drives and sail systems.

Please click [here](#) to view additional assignments and [here](#) to download TransTech's Green Marine Technology Chart.

Project Planning / Management



New tonnage often is not needed to launch a new marine venture. Repurpose is preferred to convert, convert is preferred to newbuild, when new is the need, simple is preferred to complex.

Vita-C Transport improved Central American orange juice competitiveness in the North American market by converting a redundant fish-processing vessel into a FCOJ tanker at a fraction of the cost of new construction.

Please click [here](#) for additional information on Planning services.

Venture Capitalization

Minimum CAPEX is essential to a ship's competitiveness. ShipShares liaises with professionals across all components of the capital structure to obtain lowest WACC. Our focus is advising equity capital formation. Vehicles in the US range from intrastate Crowdfunding to "full" SEC S-1 IPO registration. Investment grade financial projections comprising proforma Balance Sheet, Income Statement, Funds Flow Statement and Dilution are prepared using **SHIPS**.

Shipshares maintains relationships with providers of debt and mezzanine finance and welcomes inquiries to join our network.



Many circumstances can make a full-payout bareboat charter more advantageous than ship purchase. Please click the **M-Lease** icon to learn how this tool can assist your next ship acquisition.

Projects Seeking Capital



To view private deals from TT / SS and our partners [Please click R.S.V.P.](#)

To learn how to present your project on TT / SS or to join our network of capital providers, please [contact us](#).

Current Featured Project:



HEFTTCO: Hudson-Erie Freight Trade & Transport Co. Restore Hudson River Packet service / Preserve iconic ship. USD 5M.

Before there was the NYS Thruway there was the NYS Bluway. Go Blue 2 Go Green!

Geoff Uttmark MM MSc BSc

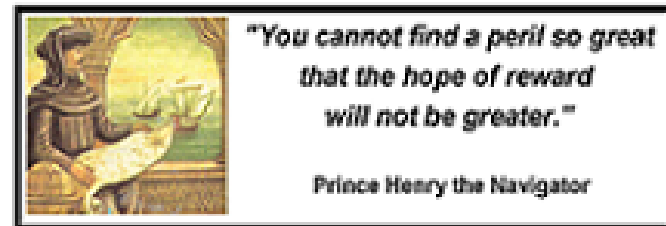
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"We Caan Indeed Get Theyah From Heyah!"

Thank You For Your Attention.