

OCEAN FREEDOM NOTES | OCEAN LIVING

[1967-1990]

PUBLISHER/ANTI-COPYRIGHT NOTICE

Published by *LIBERTY UNDER ATTACK PUBLICATIONS*, January 2021

This book is covered by a BipCot NoGovernment License. Re-use and modification is permitted to anyone EXCEPT for governments and the bludgies thereof.

Further Use Permission: Please feel free to use, re-use, distribute, copy, re-print, take credit for, steal, broadcast, mock, hate, quote, misquote, or modify this book in any way you see fit. Sell it, make copies and hand it out at concerts, make t-shirts, print it on flying disks, or do anything else because intellectual property is a State based haven of the weak, the stupid, and those lacking confidence in their own ability.



Publisher Information:

Website: www.libertyunderattack.com

Contact: shane@libertyunderattack.com

Interior Design By: Shane Radliff

Cover Design By: Miriam Zachariah

“Every vonuan a publisher. Those that can write well, write; those that can’t, edit.”

–Tom Marshall (Rayo) | March 25, 1973

LIBERTY UNDER ATTACK **PUBLICATIONS** *tell your story*

1. **An Illusive Phantom of Hope: A Critique of Reformism** by Kyle Rearden (Audiobook/Anthology)
2. **The Production of Security** by Gustave de Molinari (Audiobook)
3. **Are Cops Constitutional?** by Roger Roots (Audiobook)
4. **Argumentation Ethics: An Anthology** by Hans-Herman Hoppe et al (Anthology)
5. **Just Below The Surface: A Guide to Security Culture** by Kyle Rearden (Audiobook/Paperback)
6. **Sedition, Subversion, and Sabotage, Field Manual No. 1: A Three Part Solution to the State** by Ben Stone (Paperback/Audiobook)
7. **#agora** by anonymous (Paperback/Audiobook)
8. **Vonu: A Strategy for Self-Liberation** by Shane Radliff (Paperback)
9. **Second Realm: Book on Strategy** by Smuggler and XYZ (Paperback/Audiobook)
10. **Vonu: The Search for Personal Freedom** by Rayo (Special Paperback Reprint/Audiobook)
11. **Vonu: The Search for Personal Freedom, Part 2 [Letters From Rayo]** (Paperback)
12. **Going Mobile** by Tom Marshall (Paperback/Audiobook)
13. **Anarchist to Abolitionist: A Bad Quaker's Journey** by Ben Stone
14. **Brushfire, A Thriller** by Matthew Wojtecki (Paperback/Kindle/Audiobook)
15. **VonuLife, March 1973** by Rayo et al (Paperback/Kindle)
16. **Ocean Freedom Notes (1984-1990)** by Jim Stumm, Rayo, et al (Paperback/Kindle)
17. **Low-Cost Living Notes** (Paperback/Kindle)
18. **Survival Gardening Notes** (Paperback/Kindle)
19. **The Big Book of Secret Hiding Places** by Jack Luger (Paperback/Kindle)
20. **The Invention of Evil** by Henry Jones (Paperback/Kindle)

TRANSCRIBER'S FOREWORD

When I first read **Vonu: The Search for Personal Freedom**, Rayo introduced a possibility for personal freedom (or, invulnerability to coercion) that I had never even considered—that is, the open ocean. Since then, I have built quite a reputation in my circles for my affinity for the open ocean. I was even asked to join (and did) **The Marinea Project**, whose goal is to start a village at sea near the Cay Sal Bank.

It's a dream, something incredible to think about, but finding freedom on the open ocean is more possible than most realize—individuals and families have been doing it extensively for years.

What you are about to read, **Ocean Freedom Notes/Ocean Living**, is a publication that spanned from 1967-1990, and highlights such individuals who decided to “take the dive” and live unconventional lifestyles. In this publication, the contributors discuss inhabiting previously uninhabited ocean islands, starting permanent floating voluntary societies, starting new countries on icebergs, ocean energy sources, and more importantly, firsthand experience from “doers”, not simply theorizers.

And, if you didn't already, you will also begin to understand some individuals' endless striving for personal freedom, and the great lengths they went to obtain it. These are the people Rayo would call “freedom pioneers” and he was right.

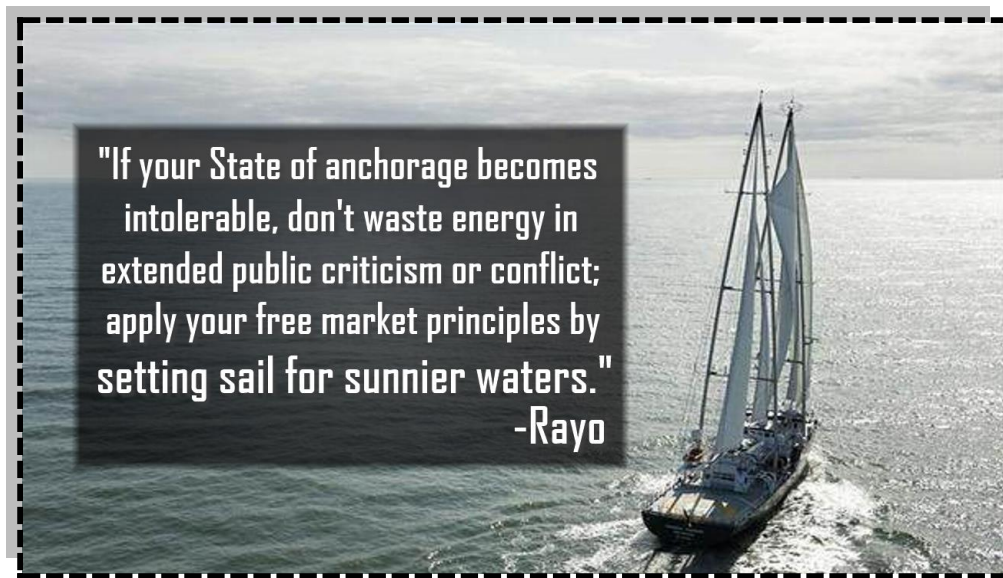
Thankfully for us in the 21st century, these individuals paved the way so that we don't have to face the same trials and tribulations that they did. In regards to the political aspect, there's still much to learn there, but if someone truly desires freedom, they will take the steps necessary.

It is my hope that the reading ahead isn't just purely for entertainment; rather, it is my hope that these articles will **inspire** you to go against the grain and try something new, whether it's in pursuance of personal freedom, or just to expand your experiences as a human being.

To conclude, I think Rayo put it best: “If your State of anchorage becomes intolerable, don't waste energy in extended public criticism or conflict; apply your free market principles by **setting sail for sunnier waters**.”

Shane Radliff
September 2017

Liberty Under Attack & The Vonu Podcast



"If your State of anchorage becomes
intolerable, don't waste energy in
extended public criticism or conflict;
apply your free market principles by
setting sail for sunnier waters."
-Rayo

from vonu: the search for personal freedom

OCEAN FREEDOM: VOL. I, NO. 1 (MARCH 1967)

Skipper: William Taylor

Crew: El Ray, John Wilcock, Kerry Thornley, Cara Leach, Walt Brown, Tom Sanders

THIS IS A SPECIAL INTRODUCTORY ISSUE OF A NEWSLETTER-NOTEBOOK-FORUM DEDICATED TO METHODS OF ACHIEVING PERSONAL AND ECONOMIC FREEDOM WITHIN THE PRESENT CONTEXT THROUGH MARINE VENTURES.

~~~

## RADIO FREE AMERICA, ANYONE?

Sometime this year, a long-planned pirate radio station is expected to open up offshore from the California coast line – a station theoretically immune to local and Federal legislation. It will broadcast for 18 hours each day on an AM frequency clearly heard throughout Southern California, concentrating upon “material of a less conventional, uninhibited and uncensored nature” than that heard over FCC-licensed stations in this country.

THE STATION will be called Radio Free America and, according to Larry Lipton...originated in the minds of students in his class at the Free University of California, some of whose experience in broadcasting and programming will be invaluable to the new station. It is planned to operate the “pirate” station under foreign registry and staff it with foreign personnel.

The pirate stations off the British coast have proved to be a major embarrassment to European governments who frequently find their own transmissions interfered with but so far they have been allowed to operate with no official harassment. Legislation is being prepared, however, to try to drive them off the air.

Operators of the proposed Radio Free America seem to feel that as long as they establish their transmitters off the Continental Shelf, in international waters, they will be free of FCC control. They have previously explored an abortive plan to establish a new “island” by sinking a concrete barge in shallow waters. Unfortunately, the water turned out to be not so shallow as had been hoped and the barge sank. –John Wilcock

(Reprinted from Other Scenes in the 6Jan67 issue of the L.A. FREE PRESS.)

SUBSCRIPTION POLICY: In order to leave the OF staff free for more relevant work, the OF subscription policy is formulated to minimize bookkeeping. \$1 will purchase a volume consisting of six issues and issue #1 of the next volume, so that all subscriptions will expire with the #1 issue of each new volume, in which the general expiration will be noted in a general reminder. Sorry, no refunds will be made on cancelled subscriptions.

## STEEL TOWERS REPLACE OLD-FASHIONED LIGHTHOUSES AND LIGHTSHIPS

“The U.S. Coast Guard has now adopted the first basically new idea in deepwater structures to aid navigation since the original lightship was moored in the estuary of the Thames in 1732,” reported THE P-D NEWS on 30Oct66 in a clipping sent in by Dave Bean. It describes new all-steel structures which stand above the sea floor. “The light structures stand from four to 35 miles off shore in from 40 to 85 feet of water. The four tubular legs range in size from 30 to 42 inches in diameter, depending upon the size of the structure, which can be built to accommodate a crew of six men or can be unmanned.”

## IN THE NEWS:

IN PACIFIC: NEW ISLAND PUSHED BY KIRKWOOD/LOS ANGELES TIMES (29Nov66-San Diego) submitted by Bob Hayes: “Actor-golfer Joe Kirkwood Jr. vowed Monday he will try again to establish an abalone fishing station off the Southland coast near the spot where his first attempt failed earlier this month...” The article mentions possible use of the island as a refueling depot and U.S. weather station, but said Kirkwood denied a gambling casino would be erected, though professional gamblers had approached him on the subject.

The 27Feb67 issue of the NATIONAL OBSERVER reported that the U.S. Coast Guard has issued a revised RECREATIONAL BOATING GUIDE “for the more than 40,000,000 Americans who take to the nation’s waterways in more than 8,000,000 boats each year...A copy is available for 45 cents from the Government Printing Office.

## VOCABULARY

(One function of OF will be to familiarize its readers with marine terminology, so important for communicating and gathering data on the sea. Definitions will be quoted from various authorities. A few will be offered in each issue, space demands printing.)

ABAFT – Toward the stern (rear) of a boat.

ABEAM – At right angles to the side of a boat.

ABOARD – On board, or in a boat.

ABOUT – To change direction in sailing. When the wind fills the sails from the other side. To come about; change course. (From the glossary of HANDBOOK: SMALL BOATS by Richard K. Bleser.

## **OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)**

---

### **HIP SHIP SAILING SOON**

Sailing under a Bahamas flag and manned by a Norwegian crew, a ship is slated to begin sailing from New York to Southampton (England) and back this summer upon which a maximum of individual liberty will be afforded the passengers.

Steve Metz and Fred Kintzer of Berkeley have announced that their newly-formed Lark Shipping Company will offer passage, including meals, for \$150 one way and \$300 round trip. Services will be slanted toward the psychedelic generation. Foreign films, inexpensive drinks, and rock bands are among the attractions. In addition the ship will be "sterile," which is to say it will never go through customs – and though the passengers must do so at the port, that the ship itself will not be searched by "guardians of the public morals" makes Larking it a possibility for pot smokers and LSD users. Further, the ship's administration is prepared to take a live-and-let-live view toward the mutually voluntary sexual activities of those on board.

For more information write: Lark Shipping Company.

---

## OCEAN FREEDOM: VOL. I, NO. 2 (JULY 1967)

Skipper: William Taylor

Crew: El Ray, John Wilcock, Kerry Thornley, Cara Leach, Walt Brown, Tom Sanders

~~~

TOWARD FLOATING INTENTIONAL COMMUNITIES

MOST existing and conjectural marine "settlements" discussed so far in both "The Permanent Floating Voluntary Society" INNVOATOR series and in OCEAN FREEDOM depend upon economically on mineral or biological resources of the ocean. Such a development is economically analogous to the landbased mining town or farming hamlet. And, like them, it is attractive mainly to persons with appropriate special skills.

For the individual whose abilities/experience lie in areas other than marine technology, other possible kinds of floating communities may offer more near-future opportunities. Small land-based communities which exist independent of tangible resources include the suburb which "exports" labor on a daily cycle, the "family-type" resort community which exports labor on a weekly or yearly cycle, the retirement community.

What would be the most feasible marine analogs? EL RAY

LIVE ABOARD SEA BOAT – a letter to the editor of BOATING w/ reply, from the March 1967 issue of BOATING.

I plan to live aboard a boat with the immediate objective of becoming internationally mobile and the eventual hope of being able to live in a floating community.

I seek information as to the most suitable type of boat. Everything from steel-hulled motorsailers to molded fiberglass trimarans has been recommended to me as a floating home. Do you know of any specialized books on living aboard? –ELTON RAY, LOS ANGELES, CALIF.

We're glad you didn't ask us to recommend the boat, for this must be your own choice – based on your own needs and experience, and the knowledge derived from the writings of people who have done what you would like to do.

For a start toward the international mobility, we would recommend two books: GREAT ADVENTURES IN SMALL BOATS, a paperback compiled by David Klein and Mary Louise King and published by Collier Books, N.Y.; and ATLANTIC ADVENTURES, collected by Humphrey Barton and published by Rupert Hart-Davis.

For a more detailed look at the experience of living aboard, you might start with THE 200 POUND MILLIONAIRE, by Weston Martyr, and RED MAINS'L, by Peter Pye, both of which are published by Rupert Hart-Davis. – Editor

STATIST EYEBALLS ON THE OCEAN

In a condensation of a speech delivered on April 25th of this year by Dr. John P. Craven (Project Manager, Deep Submergence Systems, U.S. Navy) before TOWN HALL OF CALIFORNIA, Dr. Craven is quoted as having expressed the following:

"The long-term stable solution to which we would look in future centuries is one in which every area of the ocean bottom and its resources are under the clearly recognized jurisdiction of an appropriate "coastal state" and the international enjoyment thereof carefully delineated by agreement or treaty with the "coastal state."

The condensation, "Private Property Rights for the Ocean Floor?," appeared in TOWN HALL JOURNAL. Elsewhere in the piece Craven lamented that private submarines of the future would "be ideal for illicit trade in drugs, alcohol, and other high cost-per-unit cube items of regulated commerce."

Which could bring on the end of regulated commerce, thereby providing an economic basis for world unity and peace – in which case the U.S. Navy and its Mr. Cravens would be out of work. –KERRY THORNLEY

RETURN ON OCEAN INVESTMENTS

An article entitled "Ocean Floor Stores Bonanza of Minerals," by Tom Nolan (NEA), which appeared in the 27 January 1967 issue of THE REGISTER stated:

"The National Academy of Sciences' National Research Council recently concluded that the direct return on an oceanographic research investment over twenty years would be more than three times greater than if the money had been invested at 10 per cent compound interest during the same time span.

"Some oceanographers think this is a conservative estimate."

HARVESTING SEA BEDS PRESSAGES INTERNATIONAL STRUGGLE

"Since the 'high seas' belong to no one, and therefore to everyone, the wealth of this vast expanse is likely to be vigorously contested. In the past, nations have measured their boundaries to the water's edge, and for good measure specific a three-mile, or other, limit to their sovereignty. Offshore operations are even now a matter of dispute, and the question of who owns the bed of the sea will undoubtedly be another unending source of international conflict. A scientific, economic, and political struggle for control of the sea bed could well be one of the major developments of the 21st century." (from 20Mar67 issue of THE REGISTER by World Book Science Service)

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

'PIRATE RADIO' PRESS REVIEW

Since 1959 when the first so-called pirate radio station began broadcasting unmanaged news and popular music into Denmark and Sweden, there have appeared in American national news and magazines fewer than a dozen articles on what has become a vital see-saw struggle between the powers of the various States and the ingenuity of the 'pirates,' as they wage international guerrilla war for free expression. One purpose of OF will be to provide coverage in the English language on this struggle. The success of such a venture will require help from informants abroad and will depend, equally, upon the efforts of subscribers.

As a prelude to such coverage as outlined above, we begin in this issue with a fact-oriented press review, conveying some of the essential information which has been offered in brief pieces that have appeared since 1960 in various Establishment publications. -EDITOR

"Pirates Broadcasting" NEWSWEEK (55:89) March 28, 1960 contained the following data:

Danish and Swedish radio has been noncommercial for years. Seven miles off Denmark, under the flag of Panama, a ship called CHEETAH now offers 12 ½ hours per day of music, variety shows, and commercials for Ford, Lever Bros., and American Tobacco, among many others. Radio Merkur, owned by Ib Fogh, was started 18 months ago. It reaches an estimated 600,000 Danes and 150,000 Swedes. \$150,000 was grossed by the station over the past year. As much as \$450,000 is expected in 1960. The operation is run with a minimum staff of two Danish crews, each consisting of one captain, two technicians, a watchman, and a cook. Radio Merkur is incorporated in Lichtenstein. Radio North is also about to open shop sixty miles off Stockholm, under the flag of Nicaragua.

"Piracy by Radio; Radio Buccaneer" TIME (77:35) April 14, 1961 contained the following data:

"His prey is a country with a state radio loaded with classical music, edifying lectures and a ban on commercials." Radio Nord is American owned and the station is a converted German freighter named BONJOUR, and is anchored off Stockholm. More than 1,000 fan letters are received each day by Nord. Among the advertisers are Westinghouse, Max Factor, and Vespa. Ad time costs \$40, for 60 seconds. A Dallas tycoon, Robert F. Thompson, is owner. Programs are taped in downtown Stockholm. Mercur now takes in \$700,000 a year, and 300,000 listen. Radio Veronika beams into Holland. It also tried a few programs in Dutch. International convention bars such broadcasting, but governments have been reluctant to move against the very popular stations. One example: "Though Danish officials rail in print against Radio Mercur, the government's official newspaper, AKTUEL, sells the pirates its news service."

Another example: "Fortnight ago, Sweden issued an edict that it would confiscated Radio Nord's transmitting equipment if it came into Swedish waters. But authorities did not revoke the export permit that allows Nord to ferry its tapes out to the ship."

MORE IN FUTURE ISSUES – Raul Santana

VOCABULARY

ADRIFT – Loose from its moorings.

AHOY – A term used in hailing a vessel or a boat.

AMIDSHIP – The portion of a vessel midway between bow and stern, also midway between port and starboard sides.

ANCHOR – A device so shaped as to grip the sea bottom. From it a line runs to a vessel so as to hold it in a desired position.

(From the glossary of BASIC SAILING: A Practical Course in Sailboat Handling by M.B. George and published by MOTOR BOATING.)

OCEAN FREEDOM: VOL. I, NO. 3 (JULY 1967)

SPECIAL ISSUE ON 'PIRATE' BROADCASTING: TWO (COUNT 'EM) 'PIRATE' STATIONS OPENING OFF U.S. COASTS!!!

Skipper: William Taylor

Crew: El Ray, John Wilcock, Kerry Thornley, Cara Leach, Walt Brown

~~~

### THE RADIO FREE AMERICA DECLARATION OF RIGHTS

"We reaffirm the Constitutional right to listen.

"Free speech includes freedom to amplify the volume and reach of the voice, just as free press includes the right to publish and distribute as widely as possible.

"The right to listen implies the right to choose what you want to listen to. No agency, public or private, may abridge this right, limit it, censor it, forbid it, or license one citizen or group of citizens to make this choice for the public and deny this choice to the individual citizen.

"Radio Free America will respect the right of broadcast and will not infringe on any broadcast frequency now in use in Southern California. By the same token RFA expects its own broadcast frequency to be respected by existing broadcasters and any that may desire to broadcast in the future.

"Broadcasting from international waters is analogous to publishing books in a foreign country, except for the additional advantage that the content of the broadcast does not have to clear customs like an imported book. We hold that the Bill of Rights protects free speech even when it emanates from international waters.

"The Constitutional right of free speech is not limited to native-born and naturalized citizens or to any specific language, nor is it limited to any governmentally designated media of communication."

– Friends of Radio Free America  
4 July 1967

### FREE RADIO OFF EAST COAST OF AMERICA

From the May 1967 issue of POPULAR ELECTRONICS comes the following news, passed on to us by Bob Hayes:

"Many reporters are hearing a station in the 49-meter band (frequencies vary from 6100 to about 6140 kHz) with an ID of PHOENIX, VOICE OF INTERNATIONAL WATERS ON RADIO PHOENIX SIX, THE CALL OF THE HIGH SEAS. Most reports list it as being heard at 1700-2200 on Sundays only with pop records and frequent ID's. Two disc jockeys are on board, one named Don Stack. The station refers to 'our Miami listeners.' But other reports claim that the announcer stated that they were just off Atlantic City, N.J. Still other reports quote the announcer as saying they are anchored just outside the three-mile limit and can be seen from the beach (but the exact beach was not given – Ed)."

Also from Hank Bennett's SHORT-WVE LISTENING in the same issue (a feature to be recommended for late news on radio) comes this word:

"RADIO 247, the British Broadcasting Corporation's answer to the pirate stations operating off the English Coast, was expected to begin operations 'early in 1967,' but plans now call for the new station to go on the air 'when all of the pirate stations are silence.'..."

APE AND DESTROY ought to be the motto of the British State – indeed, of all governments, for whether they know it or not the English politicians are repeating an age-old pattern, particularly common with regard to communications, though found in other fields as well. First, a bold enterpriser discovers a new solution for an old problem. Second, the State passes laws to put him out of business and then incorporates his innovation into its own system. The inventor gets no royalties, though he is sometimes rewarded in so far as the State forgoes throwing him in jail – not always. In England, the Post Office controls radio communications, and it is in the field of postal affairs that the APE AND DESTROY method has been especially repeated time after time. Examples are given of this in several pieces appearing in the June 1966 issue of INNOVATOR entitled POSTMEN AGAINST THE STATE. – GIDEON SMITH

### ROBERT MANTELL ON RFA

"Mantell, a former American Broadcasting Co. engineer, indicated serious thought was being given to acquiring one of the pirate radio ships which have been operating off Britain. A more stringent British control over sponsors virtually may put some of the British pirates out of business, Mantell claims..."

"Mantell claims that if the FCC did board a foreign ship outside the three-mile limit to see if a U.S. citizen were operating equipment, it in itself would be an act of piracy..."

"He said to define what types of advertising is acceptable for broadcast is a 'big joke.'"

"Who's to say what is acceptable?" He indicated some advertising not now accepted by licensed outfits will be used by 'Radio Free America.'" (From PIRATE RADIO STATION PLANNED OFF W. AREA, a Copley News Service article by Paul Corcoran, in the EVENING STAR NEWS, CULVER CITY EVENING VANGUARD of 2Aug67.)

## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

### BRITISH LAWYER DEFENDS FREE RADIO IN LETTER

The following letter from a British newspaper was sent [to] us by crew member John Wilcock, author of GREECE ON \$5 A DAY, and other books:

Sir – As a lawyer I wish to put on record my extreme regret at the impending passing of the Marine Offences Bill, scheduled for six weeks' time.

Morally, the question is one of British subjects and their right to choose to whom to listen on their radios and for whom to work. The Act, if passed, would forbid British subjects working and broadcasting from a so-called "pirate" radio station.

Legally, too, the position of the Postmaster General does not appear quite so secure as many people seem to believe.

Legislation by a British parliament for people of British nationality outside the United Kingdom has in the past been governed by the Statue of Westminster, 1931, which in theory gives Parliament the right to legislate for her overseas dominions only.

The present problem is not one of nationality – clearly as a general rule the British parliament can legislate for British subjects, whether in order to empower or restrict; but it is quite another thing to legislate for or against them while they are outside British jurisdiction.

Till now the law has only assumed jurisdiction over British subjects outside the three-mile limit in the severest cases, such as murder aboard a British ship and piracy on the high seas. Moreover, in cases of violence which have been occurred on board the pirate radio ships the police have firmly rejected any responsibility or jurisdiction. How can this be? Either law courts have jurisdiction or not – for all the law or none of it. Alternatively, to categorize broadcasting without a license with murder and piracy on the high seas appears to be going a little far.

The pirate radio stations do not broadcast from British ships, nor is there any pressing reason of international reciprocity why these stations should be legislated against.

Thus the attempt to legislate on so trivial a matter occurring outside the jurisdiction is a dangerous precedent and to be deplored as a threat to our freedom.

It remains only for me to say that I don't own a radio, and that I cannot stand the sound of the run-of-the-mill "pirate" radio.

Yours faithfully,  
D. CRYSTAL-KIRK

---

### 'PIRATE RADIO' PRESS REVIEW (Cont. from last issue)

"Radio Pirates Try Abducting Audiences; shipboard radio stations off the coast of Great Britain" BUSINESS WEEK (p47-8+) May 2, 1964 contained, in addition to some bibliographical information on the station managers, the following data:

Radio Caroline started broadcasting Easter Sunday, 5 ½ miles off the coast. Radio Atlanta dropped anchor this week a mile or so from Caroline. Caroline claims two million listeners. Atlanta's manager, Allan Crawford, studied the legalities of this project for four years. Liechtenstein is outside the International Telecommunications Conventions, which is where the holding corporations are registered. Panama revoked Caroline's ship registration under British government pressure and the British Post Office argues that Liechtenstein IS a member of the Conventions and bound by their rules, even though she has not signed the treaty. MI AMIGO is an Atlanta ship, a 470 ton converted cargo ship which was formerly used by Radio Nord. No more than six minutes of commercial out of every hour of program on Caroline. Caroline's ship to shore communications are via tug. First pirate station was Radio Mercur, then Syd, then Nord; Sweden, Norway, Denmark, and Finland outlawed working with or aiding commercial radio in competition with government. Mercur and Nord quit broadcasting. Syd, owned and directed by Mrs. Britt Wadner, fought the law and remained on the air. Wadner is now preparing a TV ship. Radio Veronica began in April of 1960 while the legal hassle in Sweden was still taking place. –Raul Santana

---

Brian J. Monahan sent in the following news from the WALL STREET JOURNAL of 1 March 1967: "Antarctica isn't considered a foreign country, so exclusions ordinarily granted U.S. taxpayers on earnings outside the country don't apply, the Service ruled. It's Washington's view, the Service said, that no government has sovereignty over the Antarctic region..." So if you're not enslaved by someone else, you're still theirs.

## OCEAN LIVING: VOL. I, NO. 4

(formerly OCEAN FREEDOM)

Skipper: William Taylor \*First Mate: Kerry Thornley \*Boatswain: James Parkerson  
\*Crew: El Ray, John Wilcock, Bob Hayes

~ ~ ~

### BOOK REPORT

Halacy's "Fun with the Sun" (Macmillan, 1959) may be out of print, but it contains blueprints for several solar energy projects of interest to the oceanographer. Written for school science projects, it contains plans for solar powered stills, stoves, ovens, furnaces, radios, etc. made of cheap materials like aluminum foil, wood, glass, Fresnel lenses (pronounced fray-NEL), etc. His still is supposed to distill one gallon of water per day. It consists of a 2x2 foot foil-lined box with a glass front and a sleeve of black toweling for a wick, suspended between two copper tubes, the upper one having holes drilled in it through which the salt water trickles, but untreated toweling would be short-lived at sea. His solar stove uses sixteen sectors of aluminum foil on a 4-foot frame of "construction board" arranged in a semi-circle of 36 inch radius, but a full scale drawing in which the sun's rays are depicted (angle of reflection is equal to angle of incidence) shows poorness of his focus. Perfect, small spot focus takes parabolic, rather than circular, reflector. -James Parkerson

---

THE OCEAN LAB: (This new feature will offer suggestions for research and experimentation to the aquafrontiersmen. OCEAN LIVING solicits comments, reports, and additional data from its readers on all subjects covered - with special emphasis on test results.)

"SEA-AXE" extracts floating "log cabins" from the sea. Actually this "sea-axe" is a compound tool, not a simple tool like the pioneer's axe. It consists of (1) a solar stove to heat sea water, (2) a container for sea water, (3) a cylinder of large diameter pipe half-filled with round, creek-bed pebbles from 1/2 to 1 1/2 inches in diameter, mounted to bearings of some kind, so it can be turned by crank or motor. Calcium sulphate sticks to the pebbles as "boiler scale", the same messy stuff which fouls up steam boilers and steam irons when hard water is used. Then the cylinder is rotated, ball-mill fashion, and the pebbles knocking together break off the calcium sulphate as a white powder. A (4) dehydrator for the calcium sulphate is needed, possibly a solar oven, and (5) instruments: thermometer, clock, scale, ?, to tell when the calcium sulphate has reached the hemihydrate state called plaster of Paris, which is re-combined in the proper proportions with water. Then (6) molds are used to mold the semi-circular interlocking "sea-bricks" for the vertical cylinder floats of the floating "log cabin". Special bricks must be made to form the pointed or round end seals of the cylinders. These bricks should be tested for solubility in sea water, but they will probably have to be coated with diatom-glass. Diatoms, the siliceous phyto-plankton used for glass making, may be gathered in (7) 6x15 foot conical nets of bolting silk, or stramin, towed at two knots, or scooped up from deposits south of the Aleutians or around Antarctica by (8) special buckets on long ropes of some kind, or diving buckets in which, once having picked up their load of diatoms, will be made buoyant by CO2 gas or something and will resurface by their own buoyancy, perhaps having a long fish line attached to them so they won't be lost. Silicon, if not siliceous diatom, melts at 2588°F., requiring a (9) powerful, large capacity solar stove or oven or other heat source, such as hydrogen or thermite. There is enough plaster of Paris (8 cu. ft.) to make one minimum size float cylinder (2x15 ft. with 1 inch walls) in an 18 1/2 foot cube of sea water, containing 50,000 gallons, which is a pretty kettle of fish! But the end product may be a floating homestead where society, with its constant controls and recurrent cataclysms, does not intercede between a man and nature...Check all procedures on a small scale first, and report results if any. -James Parkerson

---

### MESSAGES

Dear Sirs:

With this letter I am sending you a page from the November issue of WORLDS OF IF SCIENCE FICTION. IF is published by Galaxy Publishing Corporation.

Perhaps you are already aware of the letter to the editor which it contains and of the work of Erwin S. Strauss and his colleagues. If not, I think it would be worth investigating, for their interests seem to pertain to those of OCEAN FREEDOM. Also, some of the fictional material in this magazine (IF) deals with underwater societies.

Yours,  
D. Allen Walker  
Saskatchewan, Canada

(We were unaware both of the letter and of Erwin S. Strauss's work, and are deeply indebted to Mr. Walker for introducing us to such relevant material to our own interests. In view of Strauss's stated desire to obtain wide publicity for his project, we take the liberty of reprinting below his letter to the Editor of IF. -First Mate)



## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

From pages 161-2 of the November 1967 issue of IF:

"Dear Editor:

"I was very interested in the letter you printed in the May issue of IF from Patrick Kelly of Baltimore, in which he asked if anyone was making plans against the day when the establishment of colonies independent of existing governments would be possible (such as communities on the ocean floor or on the moon). I think I have what he (and probably many other readers as well) is looking for, and more.

"I had thoughts similar to those of Mr. Kelly for some time. Then a couple of years ago I started reading newspaper articles about the 'pirate' radio stations operating on ships anchored in international waters off the coast of various European countries, and it occurred to me that this was a means of establishing a more-or-less independent community right here, right now, without waiting for future technology. During the past two years, I and some of my colleagues here at MIT have been doing a considerable amount of speculation about and research into the technical, political, economic, and social problems and possibilities of the idea.

"Technically, the ship concept has the enormous advantage of involving no new techniques, and thus of being immediately feasible. Long-term expansion of the community, however, will require a larger source of floating "real estate". The most promising approach appears to be one found feasible during World War II by the Navy, but abandoned as not suited to their particular needs at that time: anchoring ice floes that have been covered with insulation, and keeping them solid with refrigerating units. Our studies indicate that these floes (which are plentiful in sizes up to many miles across and tens of meters thick) can be refrigerated with a surprisingly modest installation, even when their insulation is quite thin.

"Politically, the most appealing idea is, of course, the establishment of independent countries. However, these countries would have little recourse if they were attacked by a private group seeking their downfall, or were seized by a neighboring mainland country that became irritated by their presence (both of which have caused the demise of 'pirate' radio stations). On the other hand, registration of the communities as regular vessels under the flag of an appropriate country (Monaco and Luxembourg seem best suited for this), while providing a measure of protection from the fates described above, would involve accepting certain restrictions, which might or might not prove fatal to a community, depending on what the residents were planning to undertake.

"Whichever of these approaches I chosen, it is clear that taxation (even allowing for the cost of providing services that would ordinarily be tax-supported) will be considerably less than on the mainland. This economic advantage may well be the most important factor in expanding interest in the idea from a small group of enthusiasts to a broad cross-section of the population.

"Socially, the concept is a blank check for any group of utopians to put their ideas into practice through the creation of everything from a Fourth Reich led by George Lincoln Rockwell to a Classless Society manned by Marxist purists. The survival of these experiments will probably be no higher than ever, but some worthwhile ideas may emerge, and, in any case, the participants will enjoy their lives more for their attempts, successful or not.

"In short, the offshore community offers as much freedom to depart from accepted norms in politics, economics, and social structure as did the discovery of the New World (and all without Indians, even!).

"When Mr. Kelly's letter appeared, we here at MIT had just decided that it was time to follow the example set by Mr. Ettinger and his bodyfreezing proposal and seek wide publicity with a view towards getting one or more groups together to put the idea into practice. We were wondering if you might be interested in running a more detailed summary of the work that has been done on the proposal (of which the above is, naturally, only the barest outline) in the magazine. If so, I'd appreciate hearing from you.

"I meant to bring this up when you were here for Boskone, but I was too busy with arrangements. Thanks again for coming, and I hope you enjoyed it as much as we did."

(signed)

Erwin S. "Filthy Pierre" Strauss  
TTA Enterprises, 116 Broadway  
Cambridge, Massachusetts 02142

---

### MORE ON ICE FLOE...

A footnote on page 36 of the Summer, 1965 issue of RAMPART JOURNAL reads: "William J. Colson (engineer for Boeing Aircraft...) has suggested, for example, that our knowledge of refrigeration makes economical the construction of large floating islands, the base composed of an ice floe; soil could be deposited and entire small countries would emerge. The same procedure could be invoked in the construction of large dams wherein river water could be refrigerated to erect the obstruction..." -Benjamin Best

---

### MAGNESIUM, ANOTHER POSSIBILITY

Now that we can distill our own water (see Book Report in this issue), we will have to learn to extract our own magnesium, a metal so abundant in sea water that all of America's magnesium is extracted by one large Dow plant at Freeport, Texas - my share, and yours, being about eleven gallons per day. Magnesium is a light, corrosion-resistant metal used straight, or alloyed with aluminum, in airplane fuselages, burned as foil ribbons in camera flash bulbs, and powdered and mixed with oxygen, usually in the form of iron oxide (rust), to make thermite, a super-hot incendiary weapon used in welding metals. Burning of magnesium produces magnesium oxide, a heat-resistant refractory used for fire producers in the sea are hydrogen (11% of water) and salt crystal prisms for solar concentration, but salt crystals are also water soluble).

It is possible that colonies could be based on vertical cylindrical floats built up of semicircular sea bricks of magnesium foam. Though light, magnesium will not float till foamed, and as foam it goes a lot farther. Nearly anything can be foamed. Rubber and plastics are commonly foamed, and pumice is foamed rock or lava, so one would imagine magnesium might be foamed by its own vapor. Magnesium is attacked by chlorides and might need diatom-glass protection, and is 3 times as rich in the Gulf ad in the open sea. – James Parkerson

#### SEA PLANES AND THE FUTURE OF LIBERTY

Have you ever considered the mobility of sea planes? If you had one that could be lived in like a ship you would have worldwide mobility entailing the factors of speed and the ability to land on lakes virtually on any continent. I suspect that within 25 years there will not be an inch of the surface of this planet which will not be claimed by some state (and should technological progress continue at its present rate, states should have fairly good control). Since we recognize that the sovereignty of the states over us is not what they claim anyway (if it is anything at all), autonomous living the desert and polar regions is worth investigating for potential (these regions now represent what I suspect ocean conditions will be like in 25 years, i.e. areas in which the state has claim, but less than strong control.) – Benjamin Best

#### JAPANESE TRIMARANS

El Ray relays to OCEAN LIVING the following letter from New Japan Marine Co., Ltd. that came in response to an inquiry regarding the availability of fiberglass trimarans from that country.

...Thank you for your inquiry regarding trimarans.

We have plans for a 30' all fiberglass trimaran late next year but do not have plans for a larger boat.

The 30 & 35 foot trimarans are the most popular and we do not think the demand for a larger size trimaran would be enough to make it pay.

We would certainly like to interest you in one of our PI-Series trimarans which are made of mahogany marine plywood with the exterior completely fiberglassed. This is painted over with polyurethane paint (a very hard surface paint) and maintenance would be very low...

Yours very truly,  
Arne K. Oksendal

It should be noted that Japanese boats are generally less expensive than those manufactured elsewhere, with no decrease in quality.

#### STORMING THROUGH

The scout ship for an ocean community's vanguard work well offshore should be a storm-worthy displacement-type boat. The catamaran's only virtue is speed, and it can't outrun a storm – storms usually being preceded by calms anyway. The high-riding hull is vulnerable to gales and will not carry the weight of a displacement hull of similar length. Of course the cat makes a better run-about or commuter in normal weather, but the wind is the more violent of the two elements in which a sail boat operates, and all-weather yachtsmen do not even want high deck houses on which the wind can get purchase, and would prefer to make like a submarine to escape the wind. Trimarans have the advantage that all weight (measurable as several G's, thrown in any direction in rough water) is in one hull. You need a double-ended mast-head sloop with boom short enough to allow a permanent back-stay and not long enough to dip into waves when rolling on a run, causing a broach. Running in open water should be done with a diamond sail or other square sail rather than a fore-and-aft sail anyway. Hull should be very like a 22-foot lifeboat hull, because the bow-like stern of the double ender will take more punishment than a squarish transom, allowing a sea anchor to be put out astern during a storm, at which time the windage of the single bare mast is to leeward of the center of lateral resistance, resulting in perfect balance under sea anchor. An oil bag on the anchor line produces a "slick" which helps. Such a boat can sail down wind around Cape Horn in a gale using a small jib and trailing the sea anchor point first by the trip line. Though such treatment might destroy a canvas sea anchor, one could be molded of fiberglass. When the gale gets too strong or blows in the wrong direction, the trip line is relaxed and the other line takes hold and the small jib is doused. You then put out your oil bag, your anchor light and fog signal (if necessary), drink your coffee, and go to bed. –James Parkerson

#### LIVING ON THE SEA AND OFF THE LAND: A SUGGESTION

In issue two El Ray brought up the interesting problem of discovering near-future economic opportunities for would-be members of international fleet communities who lack extensive training in marine technology. Since then I have been researching one area of economic endeavor open to anyone who can read and apply what he thereby learns, an area which does not require either long years of retraining or expensive equipment. It is foraging.

When Freedom School grads John and Anne Kidd recently returned from spending three days among natives in the Brazilian wilderness, Mr. Kidd reported: "There was no evidence of cultivated plants, nor did I see a lazy individual...These people seem to be as free from the yoke of other men as any I have seen." (15 November 1967 RAMPART NEWSLETTER) I am beginning to suspect, on the basis of what I've learned so far, that no-cultivated-plants and freedom-from-the-yoke-of-other-men might frequently coincide in this world so unfortunately populated with short-sighted plunderers.

## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

This is not to argue that man's troubles began with the discovery of irrigation and that all civilization developed since ancient Egypt should be abandoned. It is merely to recognize that in the world as it is now productive individuals are the first targets of state attention, since governments being themselves unproductive need to rely upon the productive to supply their wherewithal. And taxation is always followed by regulation.

So what I propose for individuals interested in effecting their own personal liberation in the world as it is, is that they develop skills which will keep them alive without making them useful to the powers that be. And foraging is such a skill.

It also has the advantage of cushioning one from the booms, busts, blunderings of the controlled economy, and it requires enough knowledge that the unprepared victims of a massive economic collapse cannot suddenly take it up and destroy the resources available to the experienced forager. Besides, eating prejudices tend as well to keep the interests of the irrational directed toward other activities – for we live in a world that is sixty percent undernourished, yet the profuse array of wild plants available for the harvesting is seldom resorted to as a solution. If it were, the problem could be solved almost overnight!

But how does one living on the sea about living off the land at the same time? Well, one can forage at sea as well. Plankton can be gathered in nets and used as a nourishing foodstuff – as it was by the crew of KON-TOKI. Many seaweeds are edible and can be harvested, dried on deck in sun, and stored. And in some areas coconuts or other fruit can be found floating in the ocean.

Further, a foraging fleet community could easily make expeditions ashore for the purpose of gathering edible wild plants. In fact, one of the best methods of operation for such a community might be to spend most of its time in the isolated wilderness harbors of the world – taking to the high seas only when circumstances demand a change of scene. Finally, one should keep in mind that most wild foods can be stored for future use. So really there is no reason why the ocean resident should not utilize the botanical resources of the land.

Perhaps it will surprise many to learn that the literature of foraging is quite vast. If one adds the numerous papers and monography prepared by professors and students of botany to those prepared by anthropological scholars to those prepared by armed forces training departments to those prepared by woodsmen for campers and hikers to, at last, those prepared by professional writers for the general public – the sum total amounts to a good-sized library on the subject.

Further, foraging is not limited to meeting food needs. Wild plants of various kinds may be employed as tobaccos, toothbrushes, medicines, pesticides, cleaning agents, insect repellants, perfumes, clothing materials, tools, weapons, building materials, etc. And the well-informed contemporary forager who utilizes the developments of industrial civilization (whenever he can do so without forfeiting his long-range independence) is in a position to reap a standard of living from the wilds that surpasses anything that even the most sophisticated of the American Indian tribes (and some were extremely sophisticated in this respect) ever hoped for. In fact, considering the drawbacks to dwelling in our regulated, polluted, war-threatened centers of population, the neo-primitive forager of the near future might well attain the highest standard of living possible in the present context.

Your local library or bookstore are good places to begin. Future issues of OCEAN LIVING, as well, will contain detailed data on the subject. Meanwhile, it is recommended practice to keep the following rules about foraging in mind:

1) IDENTIFICATION Do not rely on common names, as these vary from locality to locality. Learn the vocabulary of the botanist as it pertains to plant characteristics. Do not under any circumstances use an unidentified plant for anything. Stay away from mushrooms unless you are an expert. Do not assume that because a plant in question is closely related to another which is known to be edible that it, also, is edible. Avoid books with “sketchy” illustrations.

2) HARVESTING Certain rare soil conditions can lend poisonous elements to nonpoisonous plants – learn about them. Some very edible plants such as nettles cause minor skin irritations when uncooked – wear gloves when harvesting. Be alert for stinging insects, snakes, quicksand, and other natural hazards. Many potherbs and other plants can be used over and over again if they are stripped of their edible leaves, but not uprooted. Be careful that unidentified plants are not harvested mistakenly along with known edibles. Young plants are usually better for eating than old.

3) PREPARATION Find detailed instructions on preparation of a plant before using it, as some are poisonous if prepared improperly. In drying leaves for storage, be sure they get plenty of air – and if the “grass pile” smell of due composition sets in, throw them out. Sun dry fruits under a screen to keep away flies. Wash well anything that may have been sprayed by insecticides for purposes of mosquito control or dusting of nearby crops, etc.

4) CONSUMPTION Do not assume that because one part of a plant is edible, the rest is too. Avoid unripe fruits and wilted leaves unless you know for certain they may be eaten without harm. In trying a plant for the first time, sample a small amount and wait awhile before eating a large quantity. Learn to use a variety of wild plants, instead of concentrating on a few, as little is known about the nutritional and cumulative poisoning effects of most species. Check edibility of a plant through more than one source – some books contain errors.

IMPORTANT WARNING: Do NOT let the warnings above intimidate you to the point that you bypass altogether the possibilities of wild plants. The rewards exceed the risks MANY TIMES OVER! Compared to edible plants, poisonous plants are rare. Compared to commercially available produce, edible wild plants are “health foods” – as they have not been grown with the use of artificial, vitamin-deficient fertilizers; as they have not been sprayed with poisons as a rule nor harvested by migrant workers who may be diseased; as they have not been handled by innumerable unknown individuals nor tainted with chemical preservatives which are also cumulative poisons; and as man, being a product of evolution, has digestive equipment which is far better prepared to cope with the hazards of eating wild plants than with those of eating commercially prepared foods. Of the poisonous wild plants, few are actually fatal – most are simply drastically purgative or emetic. Know exactly what you are doing at all times and you have nothing to worry about. –Kerry Thornley

## OCEAN LIVING: VOL. I, NO. 5

Skipper: William Taylor \*First Mate: Kerry Thornley \*Boatswain: James Parkerson  
 \*Crew: El Ray, John Wilcock, Bob Hayes, Slim Brooks

OUR PURPOSE: An information pool to help floating pioneers harvest sun, wind, wave, and sea on the last, and largest, frontier; if possible, to develop super-pioneers asea to balance tomorrow's super-society (?) ashore...

---

BOAT NAMES IN ESPERANTO, the international language fabricated by Dr. Ludwik Zamenhof of Poland in 1887 as second language for all peoples, the "language of hope":

|                                        |                                            |
|----------------------------------------|--------------------------------------------|
| Marano (mah-RAH-noh) = Sea Citizen     | Ermitejo (her-mee-THE-yoh) = Hermitage     |
| Bajano (bah-YAH-noh) = Bay Dweller     | Marilo (mah-REE-loh) = Sea=tool            |
| Golfano (gohl-FAH-noh) = Gulf Dweller  | Oceanilo (oh-tseh-ah-NEE-loh) = Ocean Tool |
| Insulano (een-soo-LAH-noh) = Islander  | Kvar Ventoĵ (kvakr VEHN-toy) = Four Winds  |
| Mondano (mohn-DAH-noh) = World Citizen | Sep Manoj (sehp MAH-roy) = Seven Seas      |
| Cigano (tsee-GAH-noh) = Gypsy          | ~~~                                        |

Multi-lingual-est book yet: Peter M. Bergmon's "Concise Dictionary of 26 Languages" 1,000 common words. No grammar, nautical terms, "Hindu", or Chinese. Russian, Greek, Arabic, Hebrew, and Japanese characters in back. INSIDIE: International flag code to describe state of yachtsmen's supplies!

---

THE OCEAN LAB: (This new feature will offer suggestions for research and experimentation to the aquafrontiersmen. OCEAN LIVING solicits comments, reports, and test results from its readers.

NAVY BEANS ALA RANCHO: Remember during the depression, when you got home from school, the first thing your mother said was, "See if the beans need water." Everybody lived on beans oiled up with a little pork or something. Beans are a good cheap food, but they have to be cooked and cooked and watered often so they don't burn, requirements agreeable to the Navy, but not to the yachtsman. Now have a better way to prepare beans than by long boiling, a way that takes no fuel and converts them into soft sweet ranch-fresh salad food rich in vitamin C. This new way is: sprouting. Beans and other seeds are imply kept moist and warm for 3 to 5 days, depending on the temperature, at which time seed remnants, little white rootlets, and little green sprouts are eaten together raw. I have had a Sunshine Valley sprouter for some time, consisting of a plastic tray, a rust-proof metal rack with two fiberglass wicks attached, cardboard and terrycloth supports, aluminum foil and clear plastic sheets. To sprout, place rack in tray, add ½ cup water, place cardboard and cloth on top and dampen with ¼ cup of water. Sprinkle on 1 tablespoon of alfalfa seed, or 1 heaping tablespoon of lettuce, reddish or millet seeds, or 4 tablespoons of wheat, rye, barley, or sunflower seed, or 5 tablespoons of peas, beans, or lentils after soaking for 16 hours. Cover with the foil for 48 to 72 hours, add ¼ cup water, replace foil with clear plastic sheet, secured by spring clothes pins, and sun till sprouts are ½ to 3 inches long. The Sunshine Valley sprouter can be purchased for \$4.50 from Natural Food Supplements, Inc. Since this sprouter holds water, it must be gimballed or suspended some way. Anaerobic bacteria are likely to grow in the unventilated sprouter, and if ventilated, more water is needed and the fiberglass wicks do not supply enough. You must use two clothes, half under the tray in the water, to serve as wicks. I recently purchased a cheaper sprouter which doesn't need gimbals or lots of water from the Los Angeles Natural Hygiene Society, which is just a screen-topped quart jar. Place 1 Tbsp. alfalfa or 6 Tbsp. mung beans in jar, soak overnight in 1/3 Qt. water, pour off through screen top, and rinse 3 times a day in ½ qt. water, reusing or drinking the rinse water. Alfalfa worked fine for me, but soya beans soured and smelled the whole place up. Indirect sunlight is necessary for this low water sprouter. I have an old ad for a 3 drawer redwood sprouter, which looks good, but I never ordered it and don't know if it is still available. Homemade sprouters should be cheaper. Distilled water is probably necessary. KEEP SEEDS DRY OR THEY WILL ALL SPROUT AT THE SAME TIME. Some edible weeds put out a million seeds a year and might supply perpetual sprouts. Scurvy-grass (*Cochlearia officinalis*) and sea plantain (*Plantago maritima*) might sprout, and even mature, in salt water. Sea weed makes good fertilizer though it must be mixed with solids to anchor it, and sea water from below the light zone has all the minerals necessary for sea weeds & salt swamp plants. If we could raise our own seeds as well as our own sprouts, we might get away from the pioneer's old theme song: "Who know what tomorrow brings: we'll reach a store! Because there are such things." Whereby I am flirting with a copyright while tempting the poets... -James Parkerson

---

PIRATE RADIO PRESS REVIEW (Continued from issue number 3)

“Caroline Calling; pirate radio ship all cost of England” NEWSWEEK (63:88) May 4, 1964 contained the following data:

Caroline is off England’s east coast and beams Beatles, jazz, rock into Britain where all communications are regulated by the Post Office. The government cut off Caroline’s ship to shore phone. 23-year old Ronan O’Rahilly operates the enterprise and raised more than \$750,000 to get it started. Broadcasting is from 6am to 6pm for a 100-mile radius. The Post Office has complained to the International Telecommunications Union in Geneva, demanding that Panama withdraw ship registration from Caroline. British radio set owners who listen to Caroline are liable to prosecution under the Wireless Telegraphy Act of 1949. –Raul Santana

---

#### BBC IMITATION OF OUTLAWED PIRATE RADIO FALLS SHORT

(John Wilcock, OL Crewman, author of travel books, and Underground Press pioneer – who is now in search of backers for his year-old publications, OTHER SCENES – sent us the below-reviewed clipping from the 8 October 1967 issue of the London OBSERVER.

In a piece entitled, “Is the BBC a pop pirate now?” Aland Day of the London OBSERVER makes some valuable comments on the BBC’s new Radio 1 network, for which the British Government adopted a number of innovations from the ‘pirate stations’ after legally destroying these.

In the first place he mentions that one of the strongest criticisms of the pop pirates was that they were breaking the Copenhagen Convention of 1948 – yet, “the BBC’s additional transmitters will be a breach of the precise letter of the convention.”

He further mentions that “radio networks are remarkably cheap to build and maintain” and that the pop pirates demonstrated “that they can be financed very successfully with quite a modest amount of advertising time.

Another point is that the Musician’s Union has a “hear-strangehold” over the BBC and thereby restricts the use of records and so there is a high ratio of talk to music on Radio 1. “The trouble is that the monolithic BBC is in a weak bargaining position: it could not for example risk a strike of its own musicians by playing records produced by the many performers who have no particular loyalty to the union. There is every likelihood that individual radio networks providing more specialized services (such as the pirates did, or a university network) could bargain much more toughly and so make full use of present day techniques in producing entertainment.”

And among Mr. Day’s concluding remarks the basic point to ‘pirate’ versus ‘public interest’ broadcasting emerges: “The fundamental social question which remains is whether as wide a range of choice as possible for listeners is a good or bad thing. On the original Reithian concept of the BBC it is a bad thing: listeners should be put under strong pressure to hear what is good for them. But is it not a more liberal and less arrogant view to say that we should all be able, by twiddling know, to choose at any time to hear what we want from as wide a range as possible – from a variety of popular of music, from a good supply of serious music, from highbrow and middlebrow talks, from programmes specially for immigrants, and so on?”

---

#### THE RIGHTS OF MAN

A piece on islands in the 21 August 1967 issue of NEWSWEEK noted that the Isle of Man, located just off the British coast in the Irish Sea, delivered a stinging rebuke to the British House of Commons for passing legislation forcing off the air Radio Caroline North. “Proudly asserting their rights as a self-governing dependence to [illegible] their own airwaves, they addressed an urgent appeal against Wilson’s crackdown on Radio Caroline to the entire Commonwealth. The next step, they solemnly intimated would be the United Nations.” The Isle of Man is the home of the world’s oldest Parliament, the Tynwald, which first convened over 1,000 years ago.”

---

#### ECOLOGICAL APPROACH PROPOSED

In an article in the Eagle Rock (Calif.) SENTINEL by Roger Swanson, Dr. Harvey A. Shiffer, Director of the Pacific Institute of Oceanography warned that the present food supply taken by the world from the sea can be increased by only four times before endangering the ocean’s delicate ecological balance. “The sea,” said Dr. Shiffer, “is the most finely balanced system in the solar system. Once we upset the balance of one species we peril all other inhabitants...The sea will be worthless if man does not take care of it.”

One possible line of approach to inhabiting the ocean which might avoid some of these hazards, if properly pursued, would be that suggested in “Goals in Geo-Technology,” BULLETIN OF THE AMERICAN METEOROLOGICAL SOCIETY, of 5 May 1966: “Can living things in the sea do our building and collecting more efficiently than mechanical machines that we can devise?” The Bulletin quotes Athlstan Silphaus, dean of the University of Minnesota’s Institute of Technology, who in answer to the question he poses, says: “It would be very expensive to collect enough euphasid shrimp, but whales collect them very efficiently. We should be breeding whales instead of exterminating them. Can we accelerate the coral animals to build reefs? Can we use shell fish to concentrate minerals? Can we plant seaweed to stabilize beaches? Can we hybridize the plants that grow in sea water, the seaweeds, and use them much more extensively as sea fruits and vegetables? Can we use halophytes – salty habitat plants – not only to grow useful food in sea or brackish water but to actually desalinate water by allowing the plants to concentrate the salts within them, and then using them as a source of salts? Seaweed is a good source of iodine, for instance.”

Merely relying on natural means, of course, does not insure maintenance of the ecological balance of the ocean, but it does seem a safer direction to go than some of those projected at present by planners in both government and large industry. In this respect it can be viewed as a step toward a positive alternative to crash program pollution.

## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

As for the lone pioneer of member of a small floating community, how can he utilize the natural resources of the ocean in lieu of expensive equipment? Any ideas out there?

—Kerry Thornley

---

INTERNATIONAL FLAG CODE (from U.S. Navy Hydrographic Office Publication No. 87 International Radio Code is given in H.O. No. 88.)

The all yellow Q flag flown alone means, "My ship is healthy, and I request free pratique," (privilege to land passengers in a port after compliance with sanitary inspections or quarantine.)

Two Q flags, or a Q flag over a repeater flag, mean, "My ship is suspect; i.e. I have had cases of infectious diseases more than five days ago, or there has been unusual mortality among my rats." (Rats?)

Q over L means, "My ship is infected; i.e. I have had cases of infectious disease less than five days ago."

Red light over white light at night means, "I have not received free pratique."

While flying yellow flag, you are expected to wait for clearance from a doctor and civil authorities who will check your papers, consisting of personal and vessel identification. One of the messages below might be flown the 2<sup>nd</sup> day if no one responds.

Y over J flags mean, "I require water urgently." If you smash your solar still and lose the repair kit in a storm, fly these flags and get into sea lanes or port.

Y over I NUMBER flags mean, "I have water for NUMBER days." Port water is not always free, nor good. Lighters (salesmen in small boats) are not supposed to sell you anything until you get free pratique and lower your Q, but they may try in the South Seas, especially to familiar yachts.

T over K mean, "I require provisions urgently."

T over J NUMBER mean, "I have provisions for NUMBER days." Small boats who don't want (often dangerous) help from steamers might fly flags meaning, "I have provisions for 90 days," though this might rouse the curiosity of H.O.87-less skippers.

During holidays, special occasions, and before races yachts often "drew ship" with all flags in alphabetical (?) order from stem to stern.

DESCRIPTION OF ABOVE FLAGS: (Full color pictures of all flags are published in yachting magazine yearbooks and Bluejacket Manuals and Sea Scout Manuals available from used book stores.) Size recommended for Sea Scouts is three foot square (not three square feet). Numeral pennants are triangles with the points cut off, having two foot luffs, one foot leeches, and four foot length. Q is all yellow. First repeater has two foot luff, pointed leech, and four foot length, being yellow triangle enclosed in blue V. L has two black squares, at tack and peak, two yellow squares at throat and clew. Y has four diagonal yellow stripes from peak to tack on red field. J flag is blue with horizontal white stripe taking up middle third. I is blue circle in yellow field. T has three vertical stripes: red, white, and blue from luff to leech. K has luff-half yellow, leech-half blue. Numeral pennants: 1 is red circle on white field; 2 is white circle on blue field; 3 is red, white, and blue thirds, vertically from the luff; 4 is white cross on blue field; 5 has luff-half yellow, leech-half blue; 6 has top-half black, bottom-half white; 7 has yellow top, red bottom; 8 has red cross on white field; 9 has white throat, black peak, red tack, yellow clew; 0 has middle third red, rest yellow, vertically.

---

MANY BOAT PLANS call for scrap iron to be used in keels of concrete. A free substitute might be black sand, which consists simply of iron particles that may be "mined" easily with a gold pan and magnet. Though black sand catches in the riffles of creeks, in many places the spring flood washes it all the way to the beach, and at Gold Beach, Oregon, gold dust washes all the way to the beach. Best source is, of course, tailings of abandoned gold mines.

---

### THE MESSAGE CENTER (GETTING DOWN TO BUSINESS)

Dear Mr. Taylor,

Thank you very much for the copy of Vol. 1, No. 4 of "Ocean Living." Enclosed is \$1 for your next 10 issues. I would also be interested in any back issues you may have on hand. How large a circulation have you been able to build up? Let me also thank you for printing my letter. I have, as a result, received letters from a number of persons interested in my ideas.

We seem to have somewhat different orientations in our thinking on the subject of ocean living. You seem primarily oriented towards long-range and theoretical discussion of future potentials of the idea but, thought you follow with interest such present activities as "pirate" radio, although as can be seen from my letter, I am interested in the long view, my first interest as a businessman, and is therefore directed towards projects which, though pedestrian compared to those you mention, give promise of immediate economic viability.

I have some concrete plans under development for implementation as soon as I get out of the army (October of next year), but I would rather not discuss them for two reasons. First, to prevent competitors from gaining advantage, and, more importantly, to prevent governments from enacting legislation which would make my operations more difficult (which would not be the first time that laws were passed in direct response to a business proposal of mine for the express purpose of putting me and any who might pick up my idea out of business). Present plans call for a number of contingent plans of operation, to be fallen back upon in turn as government action makes the previous approach unviable. Although the ultimate plans will probably be feasible in the fact of any likely government action, such plans are not quite as profitable as the ones now possible, and I would like to be able to use these methods for as long as possible. Here is one case where the ponderousness of government is an advantage.

However, I have an intermediate proposal that may be of interest. It is neither as bold as the independent self-sufficient communities you discuss, nor so prosaic as my planned activities for the immediate future. This is the establishing of commuter developments close offshore of major cities. In a place such as Los Angeles, with its high percentage of retired persons, persons of independent means, and self-employed persons, such as writers, artists, consultants, etc., it should be possible to gather, say one or two hundred people, acquire a medium-sized ocean liner (many are being sold these days due to airline competition) and set up shop under an appropriate flag of convenience, as described in my letter to IF. The kinds of people I mentioned would be in a position to be free of virtually all control of the US, although others, who depend on working onshore and thus are susceptible to commuter taxes and such devices, might still be interested if only to avoid traffic (30 minute commuting over water, no worry about the kids getting run over) noise, smog, riots, muggers, etc.

Perhaps you or one of your more business-minded readers might be interested in organizing such an undertaking. If so, I would certainly like to be kept abreast of developments, and organizers could feel free to call on me for advice at any time. Hoping to hear from you soon,

Sincerely yours,  
Erwin S. Strauss  
TTA ENTERPRISES  
BOX 248  
WHITE SANDS MISSILE RANGE  
NEW MEXICO 88002

---

#### ANSWER TO MR. STRAUSS

We are sending you back issues of #1 and #3 – as #2 is out of print. Our circulation at present is somewhere around 100. (An exact circulation count will be run from time to time in OL.)

As for news of concrete projects, it is the subject to which we give top priority whenever word of such projects reaches us – but we nearly always have to fall back on some utopian daydreaming in order to fill an issue. Hopefully, times will change soon.

The commuter ship idea sounds excellent. The first step would seem to be estimating cost. Anyone have any idea of what a medium-sized ocean liner is going for these days? –SKIPPER

---

#### UNDERWATER BREATHING IN FIVE YEARS?

Writing in the 23 May 1968 issue of the Tampa (Florida) TRIBUNE, Staff Writer Mary Anne Corpin reported on the joint convention of the American Institute of Chemical Engineers and the Institute of Chemical Engineers of Puerto Rico.

Speaking before the convention, Dr. Joseph B. MacInnis, medical director for Ocean Systems Inc., told about experiments now underway at Duke University to make it possible for divers to breathe a special salt fluid. "This opens up terrific possibilities for going down as far as 1,000 or even 2,000 feet, with no decompression or narcosis problems," MacInnis said.

These experiments, being conducted by Dr. Hannes Kylstra at Duke already have proven successful with mice and dogs. "Very preliminary work is under way with humans, filling one lung at a time with a special sterile solution," MacInnis said, stressing that general use of such methods would not come for from two to five years or longer. He also remarked on the psychological problems associated with breathing water instead of air, mentioning that a "simplified mechanical assist" will move the fluid in and out of the lungs "since water is four times as heavy as air."

The innovation, when perfected, will enable men to achieve unprecedented modality and scope of action under the sea's surface.

---

#### BRITT WADNER'S RADIO SYD

Not only does Radio Syd (pronounced "Sud" and meaning "South" claim the honor of having been the first station of its kind, it is also without doubt the most colorful of the 'pirate' broadcasters. Run by Britt Wadner, a former Miss Sweden who has been called The Pirate Queen, it is the only free station to defy edicts of the Swedish government and remain on the air when the statist persecutions of private offshore radio were just starting in 1962.

For her refusal to abdicate her right to free speech, Britt Wadner was fined fifty days' wages and sentenced to three months in prison (later commuted to one month) – and became a heroine overnight. By a conservative police estimate, 7,000 young people walked through the streets of Malmo on the following day in silent protest. This was followed by a rally of 12,000 in a public park, sponsored by English free radio tycoons.

Human rights lawyers Ulf Alfredsson and Henning Sjostrom defended her and finally the court decided that Wadner was not violating the letter of the new law, since it was aimed strictly at stations which interfered with other broadcasts in its wording (though the intent of the legislators had been to drive all competitors of the state radio off the air). It is possible that the popularity of Radio Syd had some influence on the court – a second Listener's Club rally was prohibited by the authorities on the grounds that it would "overtax" public facilities. Most support for Radio Syd came from the younger members of the Liberal Party.



## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

According to Britt Wadner's son, who spoke to Bob Hayes when the latter was visiting Sweden, Radio Syd claims more listeners than all three of the various government "programs." A local paper carries their radio log and advertisers have included everyone from small shopkeepers around Malmö to Coca-Cola and the Culligan water softener people. The station offers pop music and is now on the air twenty-one hours per day. OCEAN LIVING thanks Bob Hayes for the bulk of the information and the ad card is produced above. Those interested in more information on Britt Wadner and her stations are advised to read "Pirate Queen or Capitalist Heroine?" in the June 1964 issue of INNOVATOR. Those who would like to support such a station off the California coast are advised to write to the Friends of Radio Free America. -SKIPPER WILLIAM TAYLOR

**MNI TNX FER RPT, HPE CUAGN VY 73**



**88,30 MHz**



**RADIO SYD**

**TRANSMISSION HOURS:  
DAILY FROM 6.00 - 3.00 A.M.**

**MALMÖ 4 - SWEDEN**

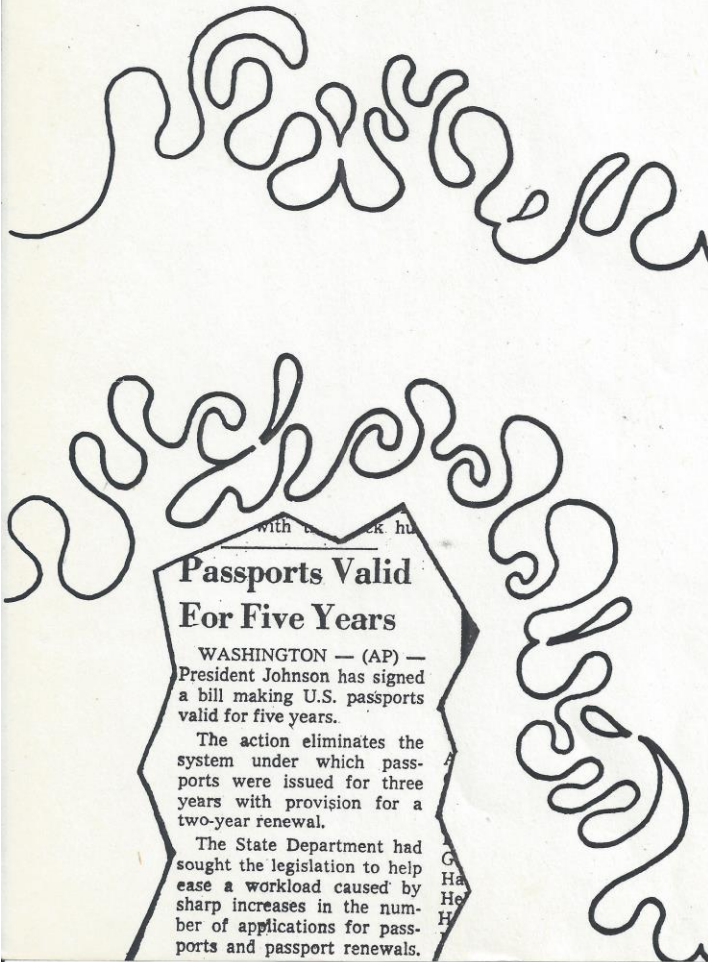
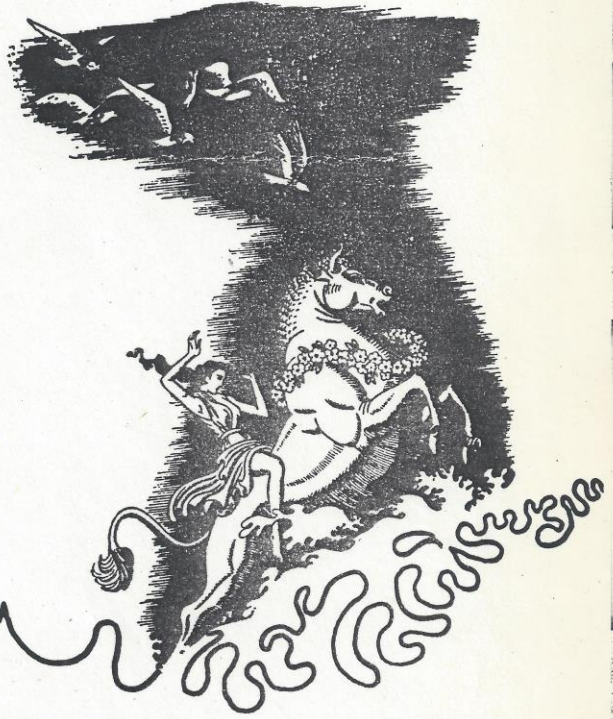


VI N 6

Ocean

Living

101



with a week hu

### Passports Valid For Five Years

WASHINGTON — (AP) — President Johnson has signed a bill making U.S. passports valid for five years.

The action eliminates the system under which passports were issued for three years with provision for a two-year renewal.

The State Department had sought the legislation to help ease a workload caused by sharp increases in the number of applications for passports and passport renewals.

The Wave  
of the  
FUTURE

## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

---

HAS THE TIME COME TO GET OUT? A recent Libertarian News Service article on the so-called Omnibus Crime Bill announces: "The American police state has now arrived!" And apparently it has, for this complicated piece of legal machinery authorizes such moral monstrosities as bugging, wiretapping, and the creation of what the article calls "a new style police private vigilante group." If the time has not come to get out onto the sea for all of us, it is certainly true that most of us should start making concrete plans to that end. INVEST IN YOUR NATION'S FUTURE – BUY A BOAT!

---

YES, WE HAVE NO BANANAS TO DRY

In subtropical and tropical regions the banana plant is common, but its fruit (which spoils rapidly, once it is ripe) is all-too-seldom in a ready-to-eat condition when the wayfarer happens by.

Every potential tropical traveler should therefore keep in mind that the unripe banana can be sliced into strips or small chunks and sun dried, bringing it to both an edible and storable state.

The dried banana lacks the sweet qualities of the tree-ripened sort, but it lends itself ideally to use as a basic foodstuff – as it is widely available, nutritious, and easy to prepare. –KERRY THORNLEY

---

THE MESSAGE CENTER

Dear Mr. Taylor:

Noting your listing in a writer's trade medium regarding your new magazine OCEAN LIVING, may I have a copy of this publication?

You may have heard of the writer, read my numerous books, and magazine articles on salvage of treasure wrecks, etc.

Do you publish such articles? Too, do you make payment in space on publisher's books?

Cordially yours,  
(Lieut.) Harry E. Rieseberg

Dear Lieut. Rieseberg:

Articles on salvage of treasure wrecks and similar ventures, particularly how-to pieces slanted to the modestly equipped ocean dweller, family, or community, are always most welcome. We pay in advertising space (which may be used in any manner consistent with OL text) on a one-to-one ratio.

Warmest regards,  
Skipper William Taylor

---

THE COST OF SHIPS – FOR RESIDENTIAL OFF-SHORE COMMUNITY

The Queen Elizabeth, which carried, if I recall correctly, about 2,000 passengers ordinarily, was around \$6 million, or about \$3,000 per passenger. Now, this allowed for a goodly number of crew, servants, etc., that a residential ship wouldn't need, as well as for such things as multiple public dining facilities, which are fine in a luxury liner, but really aren't vital in a residential vessel. On the other hand, permanent residents would need somewhat more space in their quarters, to include not only sleeping quarters, but living and cooking facilities as well. Of course, the name of Queen Elizabeth may have inflated the price somewhat, though economics of scale may have been depressed it compared to the per-passenger cost of a smaller vessel. All in all, \$3,000 per resident, initial cost, should be a reasonable estimate to, say, plus or minus 50%. Even allowing for remodeling and renovation, therefore, the price of an apartment aboard a ship of, say, 200 or 300 residents, should be competitive with that of recently-built medium-to-luxury apartments on the mainland. –ERWIN S. STRAUSS

---

OCEAN LIVING would like to feature news on the U.N. "control of the open sea" proposal, and similar current event subjects of interest to our readers. Your continuing cooperation in sending in clippings and reports in such areas is most appreciated. All contributors to a particular issue of OL will, in keeping with our new policy, be listed at the end of that issue as crew members (unless they request otherwise). So if you run across anything relevant to ocean pioneers, please bring it aboard – even if we don't write an article on it, we will be happy to have the information. – WT

---

THE CHART ROOM: ELEUTHERA, ISLE OF FREEDOM

Still unspoiled, Eleuthera is a hump-backed island in the Bahamas that stretches for about 100 miles, and is located 60 miles from Nassau, which is on New Providence. Six miles at its widest point, Eleuthera has no buses, few tourist attractions, and a single road. The 7,000 population is scattered through small settlements and these are located where there are good anchorages. Few telephones are to be found and the cost of a rented car is \$90 a week. The island's biggest hotel, of 43 rooms, is at French Leave, set in a grove of casuarina and palms by a mile of curving pink beach. A smaller harbor, Hatchet Bay, is a popular anchorage. Several homesites have been sold on Eleuthera by various companies, but only nine houses have been built or are under construction within the developments – due to the high \$20-per-square-foot minimum building cost which is due in turn to the high import duties which keep other prices high, too. But there is no income tax in the Bahamas. The fishing is excellent for bonefish, grouper, and gray snapper. Conclusion: a nice out-of-the-way place to visit. "Eleuthera" means "freedom," incidentally. –The Escapee

---

**SEA-GOING SELF-DEFENSE, ELECTRONICS AND PHOTOGRAPHY:**

In bugging (i.e. use of electronic surveillance equipment, as in warring against guerrillas, American overworks Roosevelt's emergency anti-Hitler rule: that offense is the best defense. But wouldn't it be better if sophisticated electronic detection equipment were diverted from offensive uses to defensive ones rather than being put out of business altogether? What is wrong with a yachtsman having a special radio aboard which broadcasts a special SOS the minute someone steals his yacht? I read in the paper once that the Coast Guard picked up a yacht stolen by two boys sixty miles southwest of Catalina. Though it may have been a large yacht with a red spinnaker or a radar reflector, or the Coast Guard may have conducted an intensive search, I wouldn't be too surprised if such a radio was aboard – similar to the radio they attach to a car they want to trail from a distance. What if some libertarian is sunning on his cabin roof, and some enemy comes into range, a seal poacher looking for a more exciting target maybe, and shoots him in the head? Why shouldn't a mast-head camera record the whole thing? Airplanes have "flight recorders" which are supposed to survive crashes with taped records of events leading to the crash. How much easier it would be for a yacht, whose end is less violent than plane's, to make movies of the vent and jettison the camera and film to go floating away with a graphic account of the yacht's fate from storm, fire, madness, whale, octopus, pirates, or government forces. Best of all, a multi-stage camera rocket, composed of a stack of disks each carrying duplicates of the pictures, would take off from the masthead and, either at high altitude or when shot at, would spew out the picture carrying disks in all directions to float on the sea, a resourceful "posthumous defense" against powerful naval forces or Philippine, Chinese, or other pirates. Would that be "invasion of privacy?" Two of the chemicals used in photography are readily available from the sea: bromine and agar (kelp gelatin). Silver, the most essential photochemical, is very sparse (less than one three billionth), but sodium, a photoelectric chemical, is very abundant (more than one hundredth), so maybe we could devise some kind of photoelectric photography. And how about spying on fish, swimmers, submarines, etc. with one of those wide-view peepers? Huh?

\*\*\*

**BOOK REPORT: MAGNESIUM AND ITS ALLOYS** by C. Sheldon Roberts says it takes 9.5 kilowatt hours per second for electrolytic reduction of magnesium from magnesium-chloride. Disposable carbon anodes are needed as well as lime to precipitate the magnesium-chloride from the sea water. Lime is made by roasting calcium carbonate, for which Dow uses oyster shells, also one thousandth of sea water and rich in globigerina ooze which blankets much of the Atlantic, South Pacific, and Indian Oceans some miles down. Could disposable carbon anodes also be made from calcium carbonate? Thermite, a super hot incendiary weapon used for welding metals, is made from a magnesium-oxygen mixture, and burned thermite, magnesium-oxide compound, is a heat-proof refractory serving as a defense against incendiary weapons, but it is water soluble, magnesium itself being attacked by salt. –JAMES PARKERSON

---

**IN FEBRUARY OF THIS YEAR OCEAN LIVING'S "FIRST MATE," KERRY THORNLEY, WAS CHARGED WITH PERJURY BY NEW ORLEANS DISTRICT ATTORNEY GARRISON.**

Warren Report critic David S. Lifton, who in May of 1965 discovered the man-like images on the Dealy Plaza grassy knoll in the Moorman photograph, had this to say about Kerry's arrest:

"It is not possible for the DA to be 'just mistaken' on Thornley. A fork in the road has been reached, for those who want to judge Mr. Garrison..."

"If he convicts him, I think that enough information will come out to show any objective observer that Garrison's Thornley theory makes no sense and is a creature of his mind, his ego, and the False Oswald theories of Harold Weisberg.

"On the other hand, if Garrison drops charges, or a jury frees Thornley, Garrison will go down with a thud. The statements he has already made about Thornley, the charge for perjury, the arraignment – these are the events that have already passed. They cannot be undone..."

"Garrison's foot is too far into his mouth on this one. Someone recently expressed the opinion that the only thing that will save him is either a false conviction, or a can of raspberry flavored Desenex."

---

(THOSE INTERESTED IN BACKGROUND DETAILS ON KERRY THORNLEY'S CASE MAY OBTAIN THEM BY WRITING HIM C/O THIS PUBLICATION.)

---

**WEEDEATERS' NOTES: A COMPILATION OF THE EDIBLE WILD PLANTS OF WEST VIRGINIA** by William H. Gillespie (West Virginia University, West Virginia Department of Agriculture – Scholar's Library, New York) is one of the better illustrated handbooks on wild plants you can eat and, despite the restrictive sound of the title, covers plants that may be found throughout North America and, in many instances, elsewhere...**WATER HYACINTH** (or **PONTERDER IACEAE**) is a floating plant, all too common in Florida (where it is considered a problem) which has large leathery green leaves and blue purple flowers with yellow lobes. The leaves can be cooked thoroughly and eaten, and the bloated "float" stems may be deep fried. Further, the flowers may be boiled to a gelatinous state and eaten also. It may be found near the mouth of a river and on many an island space of water. (Too bad the "Water Hyacinth problem" is not turned into a partial solution to the poverty and malnutrition problem. Man's biggest waste must consist of unused knowledge!)...**ELDERBERRIES**, dried or cooked, make excellent fare and the blossoms of the Elder, called Elder bows, make an excellent honey-tasting tea – but keep in mind that Elder foliage is very toxic. Stick to the berries and flowers...**MORE BANANAS** or, rather, more uses for green bananas include boiling

## **OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)**

them in their skins and eating them as potatoes (but be sure and cook until soft through and through or you will get a green banana stomach ache, a minor discomfort) and parching the pulp for a second rate coffee substitute. The male bud of the banana plant may also be boiled and eaten as may the central portion of the stem – as for male buds, use only the “flowers” to reduce bitterness... “SOUR ORANGES,” bumpy relatives of those you find in the store but not at all as edible, can be used as a good natural soap and will actually lather up when briskly applied. One place they are common is on sites of abandoned Seminole villages in the Everglades...BEWARE OF THE BEAUTY of the red and black bead in a pod known as the Rosary Pea, often found in Mexican or West Indian trinkets. These subtropical vine products can, if eaten in their unripe pink stage, cause deadly delayed poisoning in doses of one or more (though the mature “beads” are hard enough to usually pass through the system without harm, if accidentally swallowed) and “sawdust” or other byproducts of the Rosary Pea can, upon entering a cut or puncture of the skin, cause severe blood poisoning – a horrible way to go, needless to say. In the U.S. Rosary Peas lend color to the roadside only in Florida, but further south they are more common. (Red and black, by the way, are two colors which nature often associates with poison plants or fish or reptiles – a “warning sign” which naturalists say has survival value. This not, however, by any means a dependable guideline, as many poisonous plants, too, fly other colors or none at all – but seldom will red and black be found together in nonpoisonous plants.) –KERRY THORNLEY

## OCEAN LIVING: VOL. I, NO. 6

Skipper: William Taylor \*First Mate: Kerry Thornley \*Boatswain: James Parkerson  
\*Crew: El Ray, John Wilcock, Bob Hayes, Slim Brooks, Erwin S. Strauss; The Escapee

OUR PURPOSE: An information pool to help floating pioneers harvest sun, wind, wave, and sea on the last, and largest, frontier; if possible, to develop super-pioneers asea to balance tomorrow's super-society (?) ashore...

---

### PLANKTON

Plankton, the microscopic animals and plants that float in the sea and provide food for the baleen whale, have often been suggested as human food. In fact, some survival manuals give detailed instructions on the use of nets to gather plankton. The idea of an inexhaustible storehouse of food afloat in the sea, merely waiting to be scooped up and eaten by the hungry survivor, is an attractive one but completely impractical at the present time. It is true that animal plankton can be processed into a food resembling shrimp paste which is fit for human consumption. But this processing requires cooking, as well as careful control and selection of ingredients. If he is a competent marine biologist, the survivor afloat in a raft may be able to seine plankton from the sea and select the nutritious varieties. But even this optimum selection will be high in salt content, requiring extra water intake for elimination, and will have a high percentage of chitin – the horny substance forming the animal shells – which might be mechanically irritating to the stomach and intestines.



The real danger in eating plankton is the possibility of ingesting poisonous organisms. The most widespread of these, as well as the most deadly, are the dinoflagellates, the toxic agent responsible for the well-known paralytic shellfish poisoning. The symptoms, which occur within 10 minutes after ingestion, are gastronomical disturbances with vomiting and in severe cases, numbness of lips, tongue, and finger tips, followed by ataxia and generalized muscular incoordination; ascending paralysis; death from respiratory failure in two to 12 hours. Other toxic or irritating organisms which might be mixed in with the nutritious animal plankton are hydroids of all sorts, including jellyfish with stinging tentacles.

The authors have searched the available in biology and survival and have been unable to find any instance in which plankton was actually used as a survival food. Human test subjects used by the Air Force in attempts to determine the edibility of plankton under life-raft conditions became violently ill. In the same investigation, rats fed on plankton died, apparently through not being able to utilize more than a small fraction of the energy contained in the food. When reports of the use of plankton as food for voyagers on rafts and small boats were tracked down, it usually turned out that the persons who supposedly had eaten plankton as part of their diet had merely SAMPLED it, proclaiming it to be a satisfactory survival food. But none had eaten substantial quantities of plankton nor had used it as a principal item of diet.

For all practical purposes raw plankton is an unsatisfactory and potentially poisonous food. Don't eat it unless you have enough biological training to pick out the nutritious organisms from the slimy mess that will accumulate in the net, and unless you are certain dinoflagellates and other poisonous organisms are not present in the area.

(from THE SURVIVAL BOOK by Nesbitt, Pond, & Allen, Van Nostrand, 1959)

---

THE CHART ROOM: 71 UNPOPULATED PACIFIC ISLANDS (FROM THE 1966 ENCYCLOPEDIA AMERICANA)



## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

1960-1965 census, alphabetical order: Ahurel, Asuncion, Auki, Baker, Bass Islands, Bathurst, Bikar Aoll, Bikini Atoll, Bounty Islands (at least 5), Caroline, Cato Islands, Chesterfield Islands, Coringa Islands, Dirk Hartogs, Disappointment Islands (at least 3), Ducie, Duke of Gloucester, Eiac, Enderbury, Eniwetok Atoll, Farallon de Pajaros, Flint, Frazer, Gaferut, Gardner Pinnacles, Groste Eyelendt, Haba, Henderson, Howland, Huon Islands, Iwo, Jarvis, Kahoolawe, Kenmadec Islands, Kingman Reef, Kita Iwo, Kure Atoll, Layson, Lisianski, Malden, Marons, Maria, Marutea Atoll, Mehetia, Melville, Merir, Minami Iwo, Monte Bello, Morane, Mururoa, Namouito Atoll, Ndeni, Necker, New Georgia, Nihoa, Niuafo'ou, Oene, Oraluk Atoll, Palmyra, Parece Vela, Raraka Atoll, Starbuck, Sunday, Sydney, Taongi Atoll, Tomatangi, Tetiaroa Atoll, Vanikoro, Vostok, Willits Islets (at least 5).

Island population is by no means stable. The Los Angeles TIMES told of a family who wanted to settle on the unpopulated island of Suvarov. They spent one grubstake in Hawaii trying to get transportation to Suvarov, came back and earned another one, and got a yachtmen to drop them off and promise to pick them up in a year. According to the AMERICANA Suvarov has a population of 9 people, so I hope they are not disappointed.

According to Sloucunt's CASTAWAY BOATS, survivors of the whaler Essex, which was smashed by a whale, recuperated on Elizabeth Island (probably Henderson), thinking they were on Ducie (which was impossible since Ducie is an atoll but two miles in diameter not answering their description) where they found a seasonal spring of fresh water which discharged into the sea below high tide, as well as eight skeletons – and Pitcairn islanders raid Henderson from 100 miles away for miro wood to make carvings for trade. This book also tells of a missionary who was castaway on a small island not mentioned in the ENCYCLOPEDIA, Towiti Rahi, but 30 miles southwest of Cape Brett, New Zealand, for five months.

Nihoa, one of the Bird Islands, a U.S. National Wildlife Refuge 150 miles northwest of Kauai, Hawaii, sounds like a sure bet for someone. The NATIONAL GEOGRAPHIC map of Hawaii says Nihoa is now uninhabited, but there are Polynesian statues and 12 fertile acres, 20 miles southwest of Niihau, Hawaii, might be a good spot for a stone-working hermit, one of many not listed in AMERICANA'S "Pacific Ocean" article.

Cocos treasure island supported a family for years, having fresh water, coconuts, good soil, impenetrable undergrowth, etc., visited only by treasure hunters who pay Costa Rica (300 miles away) a cash fee, patrol boats and planes from Costa Rica, and (according to FATE Magazine) ghosts and, in the accessible volcanic crater, descendants of Inca royalty with their treasures and sciences (and census takers?).

Peter Freuchen says the Galapagos are largely uninhabited, the porous volcanic rock not holding the winter's heavy rains. Some of the islands are, or were, used for nuclear tests, and Russia has a regular Pacific missile test range south of the Hawaiis near the Palmyra Islands and warns shipping when she is making tests, Soviet naval vessels, usually trawlers, standing nearby to collect data on [illegible] missiles.

Why doesn't one of you readers row a dory around out there and check some islands and take pictures? By then OL may have equipment or money to print a nice booklet on vacant Pacific Islands. –JAMES PARKERSON

---

### THEY GYPSIES OF THE SUFU SEA

Since long before 1521 when Ferdinand Magellan sighted their floating encampments between Sulu and Borneo, the Bajaos have been doing on a more or less primitive scale exactly what many aqua-libertarians hope to try in the years immediately ahead. They have been living, as fisherman nomads on the ocean – coming ashore only to barter for rice and fresh fruit.

Consisting of stork-legged huts, virtual houseboats, canoes, dugouts, and outriggers, Badjao villages are tiny, semi-permanent, and widely decentralized throughout the southernmost islands of the Philippines. Inhabitants come and go as they please. A new arrival might stay in a community for a matter of hours or of years. Population was recently estimated in the sea-gypsy village of Tunkalamn, off Tawi Tawi Island, to be about 400.

While the existence of the Badjaos is a testament to the viability of ocean living, and therefore significant enough, it is also a door of opportunity for the neophyte ocean pioneer who would like to learn how it is done from those who've been at it awhile (either by making the Badjaos an object of academic research or, better yet, going to live among them). For with all our technology and dubious applications of same, our culture has given very little thought to the problems of living on the sea – an art the Badjaos have mastered without sophisticated mechanization, but mastered impressively nonetheless.

According to the Associated Press article by John Nance: "They know days ahead, for example, when a storm is brewing. Even if the sky is fair, the wind calm and the water smooth, islanders prepare for a storm when the Badjaos' boats stream into harbors for shelter." –KERRY THORNLEY

---

### THE LAND SHIP

The Land Ship, meeting places of Sea Scouts, is arranged to represent the deck of a vessel with ship's deck outline made of rope or of canvas on stanchions, flagstaff, ship's bell, gangways, seats, log, financial record book, etc. Why shouldn't a man who's working to save money for a boat furnish his apartment with things he will use later aboard ship, thus converting his apartment to a land ship? And a proposed (or embryo, or false, or contingent; what would you call it?) corporation which uses pledges instead of stocks, to be cashed when sufficient total is reached could also be called a land ship as it is just a dream of a future reality. Do you want to coordinate or find a coordinator for a yacht or some project? Advertise it in OL. Maybe a lot of readers will want the same thing. Contracted half, or third, length, full width and height, blueprints make good floor or wall decorations for the land ship.

---

THE OCEAN LAB: This feature offers suggestions for research and experimentation to eh aquafrontiersman. OL solicits comments, reports, additional data, and results from readers.

**SODIUM ELECTROPHOTOGRAPHY?** Not only is photography a useful deterrent to crime but where education is concerned one picture is worth a thousand words. In the libertarian's schooling a history of work and technology should replace or parallel the conventional history of politics, a "science-grammar" to replace today's "science-phrasebooks" and tumble evolution down from its irreligious pedestal and show its role in technology and in mental processes. While photography is a wonderfully developed art, and equipment available today is more than ample for any use we might have for it, silver, the most essential photochemical, has already been diverted from coin making because of its scarcity, and it occurs as less than one three-billionth of sea water. Other photo chemicals: bromine, agar, and algin, are readily available from the sea. But note this: "Phototube cathodes utilize a light sensitive surface coating, consisting of some form of alkali metal or earth. Among these are cesium, lithium, potassium, rubidium, SODIUM, barium, calcium, and strontium." (ELECTRONICS MADE SIMPLE by Henry Jacobowitz, Cadillac Publishing Co., 1958). Sodium can be removed from sodium chloride (salt) by melting it at a high temperature and electrolyzing the molten salt with a high current. Sodium reacts with air or water and must be stored in kerosene and used in a vacuum or in a gas that won't react with it. There are three types of photosensitive devices: photoelectric, photovoltaic, and photoconductive. In photoelectric cells, the negative side of the circuit is connected to the cathode and the positive side to the anode, and the current flows when light falls on the cathode. Photovoltaic devices generate electricity when light hits them, and photoconductive devices change resistance as light intensity changes. It is the photoconductive devices which are used in conventional electrophotography and xerography, and selenium, rather than sodium, is used which is only 4 quadrillionth of sea water; but couldn't sodium be adapted to electrophotography? A negative sodium plate (in a vacuum) acts as film, a positive plate close behind it attracts the electrons dislodged from the sodium by the light image through the lens. Since we don't want these electrons to spread before fixation, blurring the picture, the plate should be an insulator or of conductors insulated from each other so the electrons cannot spread, the bundle of insulated wires making an effect like screening on the image. Hopefully the electrons would neutralize positive black powder causing it to drop from the plate in light areas of the image (as in xerography) to be fixed by heat (as in xerography) or buy a gelatin or algin coating. Sounds like a possibility, doesn't it?

KELP SILK (sodium alginate) to use for paper for photos and books and for clothing, sails, hot air and hydrogen balloons, etc. is described in Duddington's FLORA OF THE SEA (Crowell 1966). Seaweeds are treated with sodium carbonate (carbon is 28 millionths of sea water) and mineral acid to extract algin, yielding 14 to 40%. Algin is insoluble in water, but sodium alginate is readily soluble dissolving in water to give a viscous solution which can be spun into artificial silk which is soluble only in sodium carbonate. Best source of algin is giant kelp (40%) which grows off California from Santa Barbara to San Diego, continental shelf here averaging 18 miles wide, much of it too deep for kelp which grows only 300 feet, but it might be grown at sea by supplying a hold-fast base and an upsurge of deep minerals such as occurs near shore. Warming and aeration of this deep water might be necessary, and such a kelp farm would lack portability... -JAMES PARKERSON

---

#### WHAT IS OPERATION ATLANTIS?

Operation Atlantis is a program for the creation of a new nation dedicated to individual freedom. The role of government will be limited to its only two legitimate functions:

1. Prevention of the initiation of the use of force (or its corollary, fraud) by one citizen against another, or by another nation against Atlantis.
2. Adjudication of differences between citizens.

These functions of government are all that is required to prevent anarchy. Regulations of ALL other human activities will be left to the free market.

Since the distance from 20<sup>th</sup> century America to a completely functioning, new, free independent nation is too large to be achieved in one leap, Operation Atlantis will be accomplished in three self-sufficient stages.

**STAGE 1** is the gathering of freedom-loving Americans in a single location in the U.S. where they can work together to build an integrated community. Stage 1 in itself is basically a land development venture along the lines of a proprietary community, and people who move here are neither committed to stay, nor to move on to Stage 2 when it is launched. Stage 1 was launched on August 30, 1968, AND IS NOW UNDER WAY. It is programmed to be a financially profitable real estate operation and is capable of standing on its own feet on that basis indefinitely. Only when conditions are right will the move to Stage 2 be made.

**STAGE 2** is the stage where Atlantis becomes an independent nation, and will take place aboard an ocean vessel cruising or anchored in international waters and putting into port for supplies or in hurricane weather. The feasibility of this step is easily visualized when it is remembered that large cruise ships are in reality self-contained floating cities. Once again, Stage 2 will continue until all conditions are right for Stage 3.

**STAGE 3** occurs with the creation of an artificial island as close to the shore of the U.S. as international law will permit and Uncle Sam will tolerate. The construction of such platforms presents no great technical problems. For example, the city of Los Angeles is contemplating the construction of an airport 10 miles off the coast. This artificial seadome would have FIVE MILE runways capable of handling tomorrow's jumbo jets. It is portable that its construction will be less costly than the acquisition of real estate a comparable distance from the city.

The day-to-day progress of Atlantis I is reported in our newspaper, THE ATLANTIS NEWS. Keep informed of developments in this exciting experiment in liberty! Subscribe now!

THE STORY OF OPERATION ATLANTIS is a booklet which describes the entire program in detail: history, finance, government, etc. -ATLANTIS PUBLISHING COMPANY, Saugerties, N.Y.

---



## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

Nodes of pure metals are sometimes found on sea floor, accretions of molecules brought together by Vanderwaal's force (?). Molecules tend to clump together, like to like molecules. The sea of course contains all kinds of metallic molecules. A plastic film to furnish mechanical support for a monomolecular layer of some rare metal is all that is needed, in theory, to get additional molecules to precipitate out on the substrate. A factory ship would process the plastic film continuously removing the harvested metal electrolytically (maybe using sun-generated electrical energy) and redepositing the monomolecular starter layer on the plastic base – and over the side for another cycle. It is a sliderule decision (engineer's decision; businessman's decision) to determine whether it would be profitable to do this – whether it would pay 6% interest (rent) on the capital investment plus operating costs, plus entrepreneurial profit. –MALLORY TRENT

~~~

Welcome aboard, Mallory. This is the kind of material we need. For a while there I thought you folks were trying to convert OCEAN LIVING into a poetry journal. I'll bet those nodules grow a lot faster in a super-saturated solution, like crystals, though crystals will grow on any kind of base, not necessarily of the same material as the crystal, and keeping the solution clean so secondary crystals don't grow is one of the main problems of crystal growing. We could surely use some of those rarer elements. Most of them occur as compounds, which are rather hard to break, rather than as elements. I wonder if Vanderwaal's force would break compounds. In any case, thanks for the idea. Send us another one.

8MM MICROFILMING

One thing libertarians need is an 8 or 16mm filmstrip and direct viewer to identify edible and poisonous wild plants, etc., and lightweight waterproof copies of bulky books might be microfilmed by movie cameras making single frame shots of each page. May 1968 POPULAR MECHANICS had plans for an electrical device to take time lapse movies which uses a solenoid to jab the camera button and get one or two frames. It should be easy to make a solenoid which will give the camera button a 1/16 second jab, converting any camera to take single frame shots. We hermits need a motor timed panning tripod too for taking our own pictures while prospecting, etc., and how about a radio control camera holder in the form of a model helicopter or flying saucer for taking your own sailing pictures.

DON'T COUNT PLANKTON OUT

While the cover story in this issue on plankton serves as a valuable warning to the contemporary neophyte voyager, it should not be allowed to exclude thinking and research pointed at developing techniques for recognizing, separating, and processing edible plankton.

A current project along these lines is scheduled to begin next spring when Dr. Jacques Piccard – renowned oceanographer and holder of the world's bathosphere deepdiving record – will launch a medium-depth submarine expedition into the Gulf Stream from the southern coast of Florida up to New England.

An immediate purpose of Dr. Piccard's expedition will be the study of plankton. At the American Commercial Fish Exposition he recently stated that the earth's soil, scientifically farmed, could produce adequate food for 10 billion people – but the political and geographical divisions make it impossible at this time. The answer, Piccard believes, is to learn to scientifically extract more foodstuffs from the sea.

The sub, holding a crew of six, is built and financed by Grumman Corp. at a cost of \$2 million. It will float at between 1,000 and 2,000 feet down, measures 50 feet in length, weighs about 130 tons, and is called the Ben Franklin.

Near-future plankton processing techniques, like those of present, will probably be expensive and require a great deal of specialized knowledge. But as understanding in the science progresses, techniques tend to become simpler and less costly – so it will be wise for the aquatic pioneer to keep an eye on the experimental technology of plankton processing, in view of the day when it can become a do-it-yourself affair. –KERRY THORNLEY

IN FEBRUARY 1968 OCEAN LIVING'S "FIRST MATE," KERRY THORNLEY, WAS CHARGED WITH PERJURY BY NEW ORLEANS DISTRICT ATTORNEY GARRISON.

Warren Report critic Sylvia Meagher, who singlehandedly indexed the Warren Report and the 26 volumes of exhibits, and author of ACCESSORIES AFTER THE FACT, had this to say to Kerry in a letter:

"I am further informed that you do not have means to ensure a proper legal representation against charges which appear to result from outright harassment and entrapment, on wholly false grounds, by an unscrupulous and vindictive prosecutor who is pressing an uninformed, irresponsible, and often lunatic 'investigation' into the Kennedy assassination which threatens to cast into utter disrepute ALL challenges to the Warren Report, including those which are legitimate, impartial, and scholarly.

"Such flagrant abuse of trust and such ruthless action against innocent bystanders can only arouse disgust and indignation – the more so when committed in the name of truth and justice, and abetted by certain of the critics of the Warren Report who supposedly are wholly committed to high principles and the strictest ethical standards. I am enclosing herewith my check for one hundred dollars to assist you in meeting legal costs in defending yourself against specious and malicious charges which amount to outright frame-up. I am also sending copies of this letter to a number of persons, including reporters and editors, in the hope that they will be willing to call public attention to your plight and to assist you with funds to meet the costs of your defense. You may feel sure I will use every opportunity which presents itself to make the facts known and to enlist support."

THE CASTAWAY'S LOGBOOK: Jim Parkerson says Duddington's FLORA OF THE SEA reports that Japanese grow edible *Porphyra* by putting bamboo sticks or nets in the water, marine organisms growing on anything not treated with copper or other poison which repels them. *Chlorella* and *Scenedesmus* convert sewage to fertilizer. Diatomaceous earth has a melting point much higher than silicon or glass, being preferable to asbestos as a refractory at temperatures over 1000°C, but various seaweeds are 15-40% alginic acid, extracted with acid and sodium carbonate solution, algin itself being insoluble in water – so who needs diatom glass to protect plaster of Paris or magnesium? Some of its salts, such as sodium alginate, are readily soluble, giving in water a viscous solution which can be spun into artificial silk, which is soluble in sodium carbonate and is used in the 'disappearing fiber' technique in weaving. Jim also advises that Becholdt's MODERN HANDY BOOK FOR BOYS (1933) tells how to make grass huts, baked clay ovens, etc., and Fernald, Kinsey, and Rollins' EDIBLE WILD PLANTS OF EASTERN NORTH AMERICA is one of the best, seems better illustrated than Medsger's, though not geographically indexed, and lists poisonous plants that could be confused with edible ones. On the subject of weed uses, Jewelweed – which some authors say they have eaten and others list as poison – is, whatever its edibility, an excellent remedy and preventative for poison ivy. Just boil in water and apply the solution. Also known as Wild Touch-Me-Not, Jewelweed has pods that snap open on contact (when dry), butter yellow flowers, and light orange sap. For more data, see Euell Gibbons' STALKING THE HEALTHFUL HERBS. –SKIN'N'BONES JONES

TWO (2) EUROPEAN SEA STATIONS REPORTED:

4Nov68 NEWSWEEK reports on the Bates family, ex-radio pirates who have commandeered an abandoned concrete RAF anti-aircraft platform in the North Sea 6 miles east of England. A buoy repairman prosecuted them because their son fired a warning shot at him when he came too near Sealand, as they call their haven. The court ruled that Sealand, being 6 miles out, is not in their jurisdiction, so if the buoy repairman doesn't take the law into his own hands, they are all se. Latest FREE TRADE (from INNOVATOR which incidentally is now an enlarged quarterly) gave more details. Not so lucky was the case reported in Oct68 ESPERANTO, official organ of the Universal Esperanto Association about LA NEKREDEBLA INSULO DE LA ROZOJ, the Incredible Island of the Roses, founded by engineer Georgio Rosa of Bologna 12 kilometers from Rimini Italy in water only 14 meters deep in the Adriatic Sea with money contributed by 6 financiers. First one was wrecked by winter waves on 13Feb65. New one has larger steel columns embedded in cement; consists of 400 square meters with bar, restaurant, post office, bank, and store surrounded by a promenade. Esperanto is the official language and stamps have been printed. On June 26 Italian police and finance ministers with armed guards occupied the Island for "reasons of security." The invaders remain though the financiers wage a legal battle and Rosa threatens to blow it all up...

OCEAN LIVING: VOL. I, NO. 7

An information pool to help floating pioneers harvest sun, wind, wave, and sea on the last, and largest, frontier; if possible, to develop super-pioneers asea to balance tomorrow's super-society (?) ashore...

Skipper: William Taylor *First Mate: Kerry Thornley *Boatswain: James Parkerson
*Crew: El Ray, John Wilcock, Bob Hayes, Slim Brooks, Erwin S. Strauss; The Escapee, Mallory Trent, Skin'n'bones Jones

~~~



### FOR EVERYONE WHO DREAMS OF LIVING ON A DESERT ISLAND THE EXHILARATING STORY OF ONE MAN WHO DID

FOR YEARS TOM NEALE DREAMED OF THE DAY HE WOULD GO TO LIVE ON HIS OWN ISLAND—ALONE, BOUND ONLY BY SEA, SKY, AND EARTH, AND WITH ONLY HIS INDUSTRY, STRENGTH, AND INGENUITY AS TOOLS FOR SURVIVAL.

AFTER SEVERAL ATTEMPTS FAILED, NEALE FINALLY REACHED AN ISOLATED CORAL ATOLL IN THE SOUTH PACIFIC, AND THERE HAPPILY BEGAN AN EXISTENCE OF BOTH FIERCE HARDSHIP AND SUPREME TRANQUILITY THAT WAS TO LAST FOR MORE THAN FIVE YEARS.

THAT TOM NEALE PURSUED AND CAUGHT HIS DREAM—AND FOUND IT ALL HE HAD HOPED IT WOULD BE—IS PART OF THE EXTRAORDINARY ENCHANTMENT OF AN ISLAND TO MYSELF.

Printed in U.S.A.

---

### ABOUT FERRO-CEMENT

Ferro-cement is an entirely different material from reinforced concrete, although the basic constituents are similar. Ferro-cement has none of the shortcomings of reinforced concrete. Ferro-cement construction basically consists of a framework of steel netting and reinforcing rods thoroughly impregnated with a very special formula waterproof cement compound. The result is a rigid hull, with overall strength comparable to steel, but with improved elasticity and fracturing characteristics. The material and process in no way resembles the more common reinforced concrete used in civil construction. Some of the basic differences are: Special pozzolanic formula, less water and no leaching, essentially no porosity, no corrosion of the reinforcing steel, superior strength with hulls of less than one inch thickness, longer life, little or no electrolysis, the concrete compound is applied so as to completely impregnate the reinforcing netting, and is not poured, higher ration of reinforcing steel to concrete, etc.

In conventional reinforced concrete the strength of the material is increased essentially relative to the strength of the reinforcing material. In ferro-cement the strength of the material is very much greater than the combined strength of the concrete and the reinforcement. In addition, ferro-cement exhibits superior elasticity and impact resistance characteristics, and will withstand impacts which would fracture much thicker reinforced concrete. Ferro-cement is unique, with an identity all its own.

The reasons for the high strength are many; however, the basic cause is that the reinforcing steel actually becomes integral with the concrete material, rather than just being added to it. This is a result of the special concrete formula and the very high ratio of steel to concrete.

Please understand that comparing ferro-cement to standard reinforced concrete is like comparing steel to cardboard. Ferro-cement is completely different, and vastly superior in all respects. This difference is extremely important, and must be emphasized. Many advantages of ferro-cement will be detailed herein. Some of these are: initial low cost, simplicity of maintenance, lack of corrosion, long life, superior strength, fireproof, good chemical resistance, excellent insulation characteristics, etc.

## HISTORY AND BACKGROUND

An historical outline of the development of this form of ferro-cement construction shows that current practice is essentially a sophisticated combination of very old techniques. 4000 years ago the Egyptians were using a pozzolanic mortar in stonework construction. Having no hydraulic (Portland) cements and no natural deposits of pozzolan, (siliceous materials such as fly ash, diatomaceous earth, some volcanic products, etc.) they were using a mortar of ground up ceramic tiles and lime. Archaeologists have found instances where the mortar is outlasting the stone, as shown where the layer of mortar is now projecting beyond the weathered and sand-blasted faces of the stonework.

In the days of ancient Rome, naturally occurring deposits of pozzolan were mined and mixed with lime for use as a mortar in stone construction. The village of Pozzuolano was one of the best sources, and hence the derivation of the term pozzolan. This name is applied to any fine granular material which has the property of reacting with the free lime in concrete to form an insoluble silica gel, and which eventually strengthens the concrete with Portland cement, pozzolans also have other useful properties, including the lowering of the heat of hydration; increasing the tensile strength; increasing the ultimate strength; providing greater resistance to weathering and chemical attacks; greatly increasing the cohesiveness of mortars; and, most important for marine work, almost completely avoiding any porosity.

---

THE SHIP'S LIBRARY: AN ISLAND TO MYSLEF by Tom Neale was published by Holt, Rinehard & Winston and is not out in paperback through Avon Books. Whatever kind of man reads OCEAN LIVING can't buy a more fascinating book for any price; it is right up his alley – or channel, perhaps.

Neale is a New Zealander who, after he had passed the age of 50, fulfilled a long-held dream of throwing up his job as a storekeeper in the Cook Islands and voyaging five hundred miles from civilization to live entirely alone on the tiny island of Anchorage in the fragile Suvarov atoll. From October of 1952 until June of 1954 and then again from April 1960 to December of 1963 Neale lived an independent and isolated life on his beloved island – undergoing both fantastic hardships and delightful interludes of ease and tranquility. The result is a story which could not fail to entrance anyone who is really alive and which, moreover, is related in such an articulate, detailed, and colorful style as to be instantly recognized as the stuff of classics.

Neale takes us on a tour of his island and then through his struggles in reconditions a shack left over from WWII days when the isle was a lookout post, and through his work of building a garden and taming fowl and slaying wild pigs, and finally into his psychological battles over things made significant by his isolation such as the rationing out to himself of cigarettes and canned bully beef. And every three to six months or so, just to keep things interesting, there is a storm or a visiting yacht or accident (as when he dislocates his back is unable to move!) or bout of fever. But it becomes quite clear before long that the price of a few risks is, in his opinion, a small one to pay for the rewards afforded by more than five years of solitude, sand, sea, and sky – with only the roar of the surf on the reef, the crowing of cocks, the chattering of wild birds, and the purring of one of his cats to underscore the Great Silence.

Accustomed to the tempo of natural living, Neale returns to his life as a storekeeper at the end of his first adventure with a revealing perspective on what passes to most of us as everyday life. The speed with which things are done, even in the slow-paced Cook Islands, now seems to him alarming – and he comes soon to feel utterly enslaved by that tin, ticking contraption called the clock. But the local bureaucracy blocks his returning to Suvarov by more conventional means and a number of years pass before a friend offers to take him there on a private yacht.

The second stay is fully as engrossing as the first and the only pity is that the book, which is of normal length, ends much too soon. Like all precious things, there is just not enough of it! The reader ends up with a deep affection for Suvarov and Tom Neale – and the knowledge that he will read this book again and again in the years ahead.

Neale returns to the storekeeper's profession the second time out of a number of considerations, including the realization that he is getting on in years and has done what he set out to do. But as he says in the postscript: "I have a wealth of memories that no men can take away from me..."

And so long as books like his are popular, there is still hope for mankind. –KERRY THORNLEY

HELL IN THE PACIFIC was filmed on location on uninhabited Palau Islands and shows scenes of a small handmade bamboo raft at sea in all kinds of weather including good line squalls. This movie simply but forcibly ridicules violence by putting it on a personal level, instead of national or religious. Fun for sailors!

---

THE OCEAN LAB: This feature offers suggestions for research and experimentation to the aquafrontiersman. OL solicits comments, reports, additional data, and results from readers.

CLOSED-CIRCUIT LIFE SYSTEM: The plant is the reciprocal of the animal in three important respects: flowers vs. orgasm, carbon dioxide vs. oxygen, sugar vs. acid. Plants use the taste of both our lungs and our stomachs, converting carbon dioxide into carbohydrates while releasing pure oxygen, during photosynthesis, and likewise making good use of manure. One of the advantages of manure would seem to be that its odor is repulsive to animals, and it therefore gives the plants a chance to recuperate, but use of human manure in a closed circuit hothouse seems to be advisable for forays into space – and to sea.

The October 1966 issue of FLYING SAUCERS published a report from the Soviet Union, EARTH MODEL OF A SPACE HOTHOUSE by M.A. Milkhiker, (Chernovtsy), which says each cosmonaut needs three kilograms of urine (1 kilogram equaling 2.2 pounds). Tsialkovsky proposed a space hothouse, and they grew potatoes and onions in no way inferior to those of collective farms on plastic using treated urine for nutrients and moisture. Treatment of the urine included, first, disinfection by sunlight; second, removing sodium and chlorine ions (salt), which unfavorably influence plant growth and development, without changing contents of the other salts nor evoking its oxidation or alkalization, by using ions of silver in a device they specially designed; third, diluting one part of urine with three parts of distilled water; and, fourth, adding to each 2 liters (1 liter equaling 1.056 quarts) 0.1 milliliter of a solution of boron, iron, manganese, zinc, copper, and cobalt from a solution of the following microelements in 200 milliliters of distiller water: 5.8 grams of H<sub>3</sub>B<sub>3</sub>O<sub>3</sub>, boric acid 9 which occurs as 0.03 gram per kilogram of sea water); 3.8 grams of MnSO<sub>4</sub> 5H<sub>2</sub>O, a mixture of manganese sulphate with 5 parts water 9manganese occurs as 1 quadrillionth to 1 trillionth of sea water); 0.4 gram of ZnSO<sub>4</sub> 7H<sub>2</sub>O, zinc sulphate with 7 parts water 9zinc occurring as 5 quadrillionths of sea water); 0.4 gram of CuSO<sub>4</sub> 7H<sub>2</sub>O, copper sulphate with water (copper = 1 quadrillionth to 1 trillionth of sea water); traces of cobalt (less than 1 decillionth of sea water); 44 grams of FeSO<sub>4</sub> 7H<sub>2</sub>O, iron sulphate in water (iron = 2 quadrillionth 2 trillionth of sea water); and 1.8 grams of H<sub>2</sub>SO<sub>4</sub>, concentrated sulphuric acid (Sulphur = almost 9 thousandths of sea water). The urine itself supplied oxygen and the primary nutrients: 0.322 gram of nitrogen, 0.062 gram of phosphorous, 0.858 gram of potassium, 0.160 gram of calcium, and 0.048 gram of magnesium in each 2 liters of 1/4 –urine 3/4-water. The article says solid excrement can be treated by burning. Since seaweeds are salt tolerant, removal of the sodium and chlorine ions from urine by using silver ions in their special device would not be necessary in a seaweed aquarium. Seaweeds are, like meat, complete proteins, and do not use salt in their structure, thus easily converting to fertilizer for salt intolerant plants. The shortage of nitrogen and phosphorous in the light-Zone of the sea curtails phytoplankton growth, so urine as well as deep water seems to be a source of these primary nutrients. Best “soil” they found was made of 15x20 millimeter ribbons of fine-pore polyurethane foam woven together and supported from a frame of plastic pipe. This foam is completely harmless to plants, completely sterile; neither bacteria nor musty fungi develop on it, seeds planted in it do not rot, and roots are well aired. Electrodes of zinc foil in the substratum create an electric field, which might be increased by magnetic filings, increasing the yield. –JAMES PARKERSON

---

### ARE CANADA AND MEXICO ILLEGAL?

“If these reefs were available for private construction totally outside the control of the United States government,” said Federal Judge Charles Fulton, “they could conceivably support not only artificial islands and unpoliced gambling casinos, but even an alien missile base all within a short distance of the Florida coast.”

And because it therefore involves such a dire threat to “our security as a nation” Judge Fulton ruled in Miami early in January that the proposed new nation, Grand Capri Republic, is a no-no. He cited the “outer continental shelf act” in support of his ruling that Triumph and Long Reefs – upon which the new country was to be built – fall under control of the U.S. government even though they are actually beyond the territorial limits of the United States as these are fixed by international law.

Louis M. Ray, who established Acme General Contractors in Orlando, Florida, and a group of Bahamian businessmen who plan to colonize the reefs indicate they will probably appeal the decision which was handed down in a U.S. Attorney’s suit against Ray. The nearest land to the proposed site of the envisioned nation to undisputably fall within U.S jurisdiction is Elliot Key, Florida, recently named by Congress as the Biscayne Bay National Monument.

If a foreign nation situated about three miles from Elliot Key would be illegal for reasons of posing a threat to “our security,” one can only wonder why no action has been taken against two much larger countries which are both even closer to the limits of the U.S. – namely Canada and Mexico. Conceivably, they too could support alien missile bases were they so inclined – though in this age of intercontinental ballistics it is hard to see what difference it would make if they did. –KERRY THORNLEY

---

THE ISLE OF ROSES, the man-made island taken over by the Italian government “for security reasons” – has, since our last report, been sentenced to destruction, on the highly dubious grounds that the mineral rights to the sea floor beneath it area owned by the socialized Italian petroleum company AND – get this! – the island “violated the freedom of the high seas,” as no one, said Rome, is “entitled to occupy a space in the sea permanently.” Mussolini, one gathers, is alive and well on the mainland.

---

### THE REAL RADIO FREE EUROPE: A REPORT BY RICHARD J. KING

We are proceeding with our plan to establish a twin-language commercial radio network broadcasting to Europe (as Radio London/Hamburg International) from a ship or artificial island.

We have been offered such an island which sleeps 60 and is complete with helipad and distillation plant and generators producing 3 KVA. This island was designated as a Radio and T.V. island and is complete with full studio equipment. She can be sited 100 miles or more from the nearest country right off the shipping lanes.

We have organized 27,000 PW in advertising revenue, all of which, this being an extra-terrestrial venture, is tax free. We have also discovered how to prevent an attack upon us as happened to the ISLE OF ROSES recently (which located only just outside Italian waters).

Our aim is to use the profits from the stations to expand the size of the island on the lines of the Pilkington concept. As pirate radio Veronica is making 21,000,000 a year from advertising you will see that such a project is not beyond the bounds of possibility. The eventual aim is the establishment of the proprietary State of Laissez Faire – casino, lottery, free banking, free port, fish farming, research, light industry, trading, and so forth, luxury resort. A North Sea Hong Kong close to Europe!

Right now we are in need of additional finance and if any OCEAN LIVING readers would care to invest we can promise them a good return. Marine commercial radio has been proved here in Europe. Radio London made 2100,000 a month prior to the Marine Offenses Act, and Germany has no such law. We have also found ways around the Act as far as British advertisers are concerned. –EUROPEAN PROMOTIONS (SHANNON UNLIMITED)

#### COUPLE FINDS FREEDOM FROM TAXATION IN OCEAN LIVING

"You can pick your neighbors," says Mrs. Ball. "If you don't like someone next door, you just sail off into the sunset."

Mr. Ball explains, "I figured the only way to get rid of the property tax was to get rid of the property."

Mr. and Mrs. Fred Ball live in Sayreville, New Jersey, aboard "Patience II." They took up this lifestyle after getting a \$500 tax bill on their six-room suburban home last year. "Patience II" is a three-room cabin cruiser that can sleep six and is 37 feet long. Its yearly dock fees in a slip near Raritan Bay run at \$300.

Ocean living, according to Fred Ball, is "a lot like camping. We have everything we had in a house, except things are a bit smaller – including the bills."

This suits both of them fine, according to a recent Associated Press report.

#### RADIO PIRATES HITCH UP TO THE BBC BY JAMES DALRYMPLE

(London, 16Aug68) The cheekiest radio pirates yet were sunk yesterday. But it needed the heavy guns of the B.B.C. and the G.P.O. to do it.

Embarrassed officials found the pirates booming out their illegal pop from a house in the shadow of a B.B.C. building in Richmond Way, Shepherd's Bush.

And, worse, the pirates' 15-bob aerial was hitched to the fire escape of the B.B.C. offices.

The fun began shortly before 5 a.m. when Radio Free London opened up for the first time from a rented room in Addison Gardens, just across B.B.C.

But there wasn't enough power. So the pirates decided to improve the aerial's strength.

Stealthily, two of them crept over a railway line, up the first escape, and hooked in their aerial.

Power increased a thousand-fold and people all over London were listening to the swinging pop.

But just before lunch a B.B.C. executive looked out.

Three hurried phone calls brought out the B.B.C. security men, the G.P.O. engineers, and the police.

Mr. Paul Herries, who was at the pirate station collecting material for a book said: --

"It was hilarious. First a couple of B.B.C. men leaned out of a window and asked what the \_\_\_\_\_ we were doing."

"One of the disc jockies politely told them where to go and continued broadcasting.

"Then the police arrived – swarms of them – and sealed off the building.

"Finally the pirates decided to uncouple the aerial. A moment later the police came in, followed by G.P.O. engineers.

"They took away the transmitter, the record-playing equipment, and other stuff."

One of the organizers of Radio Free London said last night: "The temptation to hook up the aerial to the B.B.C. was just too much for our lads." (Reprint of a clipping from a British newspaper sent in by Richard King.)

#### DEPARTMENT OF INTERIOR GOES EXTERIOR

Of interest to offshore developers: oil companies are now paying the U.S. Interior Department as much as \$600,000,000 for oil rights to the sea bottom AS FAR AS 30 MILES OFFSHORE, well outside the territorial limits. The National Observer Newsbook, SEA HORIZONS, MAN'S LATEST DISCOVERIES IN THE WORLD OCEAN – a paperback selling for \$2.45 – speculates on whether the Department of Interior would decide it has authority to grant oil leases 400 miles from shore in water two miles deep. Oil companies, by the way, pollute the ocean as much as they pollute the air with smog – but this underwater "smog" is made up of depth charges, slime, dead birds, and dead fish.

Other present mineral exploitation of the sea includes tin mining by Thailand and Indonesia, limestone by Iceland, iron by Japan, diamonds by South Africa, which operations the U.S. Department of Interior has not yet claimed jurisdiction over.

THE CASTAWAY'S LOGBOOK: The way to get the bitterness out of shelled acorns (of the bitter varieties) is to boil for two hours, changing the water every time it becomes tea colored. After that, thoroughly dry in a slow oven, grind coarsely, and store in sealed glass jars. Another way to remove bitterness is to run cold water through meal which has been already ground and dried (but not boiled) for a period of about twelve hours. A recipe of acorn bread uses

## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

a cup of acorn meal, a cup of white flour, three teaspoons of baking powder, one teaspoon of salt, and three tablespoons of sugar (or honey). To this add a beaten egg, a cup of milk, and three tablespoons of salad oil. Mix together just enough to moisten everything. Pour into greased pan and bake at 400 degrees for half an hour. Acorns are plentiful in nature, easy to store (by just making sure to discard all those with worm holes in them beforehand), and they contain many vital nutrients. Learn to use them! –Skin'n'Bones Jones

---

THE FLAG OF SEALAND. The leftover WWI artificial island that has been virtually declared an independent nation by an English court, has its own flag. According to Sealand's king, Roy Bates, "the red is for Roy, the black for my old 'pirate' radio days, and the white diagonal is to show that we are on the level."

---

THE CHART ROOM: Nan Madol is in Pnape within the eight-trust territory of Micronesia – it is a manmade lagoon consisting of some 80-odd islets. No one knows who built it. The "lost city" of Nan Madol is surrounded by high walls built of great stones. Canals flow between the empty buildings, the waterways choked with mangroves and the edifices overgrown with jungle. Pahnkedira, a forbidden place, is feared by the natives who today inhabit neighboring islands and is said to have been the home of an ancient ruler. It can be reached only by water. Ponapean boatmen will take you to this part of Nan Madol, but they'll insist on waiting for you in the outrigger, should you choose to go ashore.

Ponape is linked with what passes for contemporary civilization by Air Micronesia, the newest and smallest airline in the Pacific. The air terminal is on Johnston Island where the only hotel is the Kaselehli Inn – but prices are more than reasonable at \$4.50 a night. And steaks are 45¢, coffee 5¢ a cup, fish 10¢, salad 5¢, and pie 10¢ at the restaurant, Joe Henry's.

Guam, the major gateway to Micronesia, can be reached by air from Honolulu for \$200 – provided you are willing to make a couple of 48-hour stopovers on in-between islands. Otherwise, it will cost you \$217.00.

Micronesia is a U.S. trust of 2,100 islands spanning an area the size of the continental United States. A very large number of these islands, some of them lush and mountainous, are uninhabited. The Micronesian trust includes the Marshalls, the Marianas, and the Carolines.

What are you waiting for?

---

### HOUSEKEEPING HINTS FOR LIFE-RAFTERS

Skin divers have found that putting your head under water and shouting will often scare sharks away.

Afloat in a life raft, don't throw wastes overboard, or clean fish into the water when sharks have been sighted.

Flying fish can be caught at night by rigging the rubber sheeting of the standard war-surplus raft in a manner so as to reflect moonlight. Any source of light aimed at the water at night tends to attract fish.

Avoid spiny fish and those with bone-like, irregular teeth. Don't make fishing lines fast to your person, as you can be pulled off-balance and overboard by a sufficiently large fish or shark. Don't eat eggs or liver of fish or fish with bad smell, pale or slimy gills, sunken eyes, flabby skin, or with flesh that stays dented when pressed.

---

### OCEAN TREASURE READING LIST

\*Horner, Dave. SHIPWRECKS, SKIN DIVERS AND SUNKEN GOLD. Dodd 1965. Exiting stories of where treasure has been lost by pirates and shipwrecks, and modern methods of seeking the treasures.

\*Silverberg, Robert. TREASURES BENEATH THE SEA. Whitman 1960. The story of lost treasure beneath the sea, and of the men whose boldness brought them sometimes wealth, sometimes heartbreak.

\*Stirling, Nora. EXPLORING FOR LOST TREASURE. Garden City 1960. True tales that are more exciting and dramatic than fiction.

---

DRINK SEA WATER? Not for the water, but George W. Crane, Ph.D., M.D., says in THE OCEAN'S 44 TRACE CHEMICALS (Antidotes for Deficiency Ailments), that a scant quarter cup per day of sea water sterilized by boiling for 10 minutes cured arthritis, asthmas, and Parkinson's disease and improved cataracts, brittle fingernails, acne, and skin infections; better than salt tablets...

---

### SEA CITY: SUN TRAP ON THE DOGGER BANK...

An article by Nicholas Taylor with color drawings by Roy Castle from the Sunday supplement of a London paper, was sent to us by Richard King of EUROPEAN PROMOTIONS (Shannon) UNLIMITED. Pilkington's Glass Age Development Committee hopes to plant their town of 28,000 people 15 miles out in the North Sea, tapping the underlying natural gas for heat, electricity, refrigeration, and sea water distillation. It has a 16-story aerodynamic wind deflector forming a horseshoe around a warm lagoon for swimming, marinas, and 120-foot long floating islands. All houses have private terrace gardens, and there is a hotel, bars, shops, clubs, schools, etc. There is a soccer field and other recreation spaces. The article includes color photos of a large scale model. Fish farming, water distillation for water-short East Anglia, and a natural gas plant are planned, and commercial rentals are available. The whole things will be enclosed in an area of 4700 by 3300 feet, 180 feet high, surrounded by a floating breakwater 200 feet away to dampen the waves. It will provide England with new expansion room, marinas, fresh water, and natural gas. It probably won't harbor gambling casinos, pirate radios, tax havens, etc.

## OCEAN LIVING: VOL. I, NO. 8

An information pool to help floating pioneers harvest sun, wind, wave, and sea on the last, and largest, frontier; if possible, to develop super-pioneers asea to balance tomorrow's super-society (?) ashore...

William Taylor, the skipper who launched us under the title of OCEAN FREEDOM back in the summer of 1967, isn't with us now. Present skipper James Parkerson.

First Mate Kerry Thornley has been the driving force to keep us afloat. February FREE TRADE says Kerry will edit the Summer INNOVATOR, which will be about "Water Power," meaning freedom through ocean ventures.

Boatswain's job open: Any reader with good ideas or philosophy or equipment he is willing to share with OL readers, taking his pay in fun, information, and potential, please contact us.

CREW: El Ray, John Wilcock, Bob Hayes, Slim Brooks, Erwin S. Strauss, Richard J. King, Skin'n'Bones

COMING: Big underwater "hubble-bubble pipe" that acts as an artificial gill, extracting oxygen from the water, and other exciting OCEAN LABs.

~~~

THEN: "People who ask what a yacht costs can't afford one." -J.P. Morgan

NOW: "People who ask what profit there is in small boat sailing wouldn't be satisfied with it." -J.O. Parkerson

Is that progress? Maybe, but I think the people who are buying out of society may come out as well as those who are buying into it. JP



LETTERS FROM ERWIN S. STRAUSS

Dear Mr. Parkerson,

Thank you very much for the regular issues of Ocean Living. I find it just about the most useful publications I receive relating to offshore developments. I'm enclosing another dollar to extend my subscription. Keep up the good work.

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

My plans are proceeding fairly smoothly, and I'm hopeful of having a platform in the water this year. I enclose a Xerox of a letter I sent to a number of New York financial institutions (banks, investment banks, small business investment companies and stock jobbers) just before I went there last month. As was not surprising, there was little interest in the financial Establishment. However, I also got a chance to meet with Mr. Werner K. Stiefel (with whose Operation Atlantis I trust you are familiar) and members of his group to discuss their plans to launch some form of offshore installation this year. My design will be almost ideal for that purpose.

In addition, I have a number of other prospects across the country, including Los Angeles. I expect to be out there in July and/or April. Perhaps we can get together at that time.

I'm enclosing copies of a number of clippings that have some bearing on our mutual interest. Some of them are no doubt familiar to you, but others may not be. Of course, most of the schemes assume governmental support, and hence postulate a large scale, and construction in shallow (20'), sheltered waters, which doesn't help us very much.

Looking forward to the next issue of OL.

Sincerely yours,
[signed]
Erwin S. Strauss

~~~

Gentlemen:

I am presently in the Army, stationed at White Sands, where I expect to remain until I leave the service early next fall. At that time, I intend to base myself in the New York area and launch a business venture. I will be back East on leave early next year, and, if you might be interested, I would appreciate an opportunity to discuss financing with you at that time.

Before I get into the nature of the enterprise, let me give you some biographical background about myself. I grew up in this country, Europe, and Asia while traveling with my father, a Foreign Service Officer specializing in international banking and finance (now consultant to American business in Europe). In September 1961, I entered the Massachusetts Institute of Technology. The next spring, three other students and I announced a plan to import foreign-made textbooks at great savings in labor costs and distribution markup. Had we known of the extensive holdings of MIT and many prominent faculty members in book publishing and distribution, we could have predicted the outcome: expulsion proceedings were begun three days after our first announcement.

Readmitted a year later, I graduated in February 1967, receiving a BS degree in Physics, with a minor in Industrial Management. After lengthy negotiations with MIT to acquire all rights to my Index to Science Fiction magazines published since 1950, which I was sharing 50/50 with the MIT Science Fiction Society, I supported myself handling distribution and sales of this book and various other publications full time, until I was drafted in October 1967.

The product I will market is an ocean worthy platform of unique design, in which the platform itself is located 30 to 100 feet above the water's surface on four air cells. Model tank and wind tunnel tests of the design to 150 mph winds and 60 foot waves are now being completed and have been uniformly encouraging. I expect to have a complete report when I come East.

This concept has a number of advantages over competitive designs. It is far less expensive than any existing type of open ocean construction (about \$65,000 for an 80' square platform 40' off the water, including anchoring and an industrial structure of two stories on top, or about \$10 per usable square foot), and can be built practically as large as needed. Ships, buoys, and rafts that sit on the water are sharply limited in size by the enormously increased strength that large dimensions require to withstand direct pounding by storm waves. Even smaller sizes must be massive enough to make them quite costly by land construction standards. By keeping all rigid parts well above the surface the air-cell principle avoids these difficulties.

Although less stable than platforms built on pilings, air-cell platforms are, in normal weather, stable to the senses of the occupants, and quite moderate in pitching even under hurricane conditions. They are also much easier to move than platforms on pilings, and do not suffer from the metal fatigue problem that forced the Texas towers to be abandoned.

Construction of the prototype and other expenses during the first year or so will require an initial capital of \$100,000. If you are interested in discussing this in more detail, I would appreciate hearing from you. If not perhaps you could suggest a firm that might be interested.

Sincerely yours,  
Erwin S. Strauss

# TTA ENTERPRISES

BOX 248  
NEW MEXICO 88002

WHITE SANDS MISSILE RANGE

February 19, 1969

James Parkerson  
Box 17463  
Los Angeles, Cal. 90017

Dear Mr. Parkerson,

Thank you very much for the regular issues of Ocean Living. I find it just about the most useful publication I receive relating to offshore developments. I'm enclosing another dollar to extend my subscription. Keep up the good work.

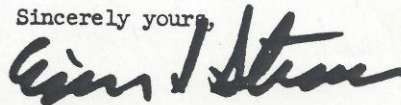
My plans are proceeding fairly smoothly, and I'm hopeful of having a platform in the water this year. I enclose a Xerox of a letter I sent to a number of New York financial institutions (banks, investment banks, small business investment companies, and stock jobbers) just before I went there last month. As was not surprising, there was little interest in the financial Establishment. However, I also got a chance to meet with Mr. Werner K. Stiefel (with whose Operation Atlantis I trust you are familiar) and members of his group to discuss their plans to launch some form of offshore installation this year. My design will be almost ideal for that purpose.

In addition, I have a number of other prospects across the country, including Los Angeles. I expect to be out there in July and/or April. Perhaps we can get together at that time.

I'm enclosing copies of a number of clippings that have some bearing on our mutual interest. Some of them are no doubt familiar to you, but others may not be. Of course, most of the schemes assume governmental support, and hence postulate a large scale, and construction in shallow (20'), sheltered waters, which doesn't help us very much.

Looking forward to the next issue of OL,

Sincerely yours,



Erwin S. Strauss

ESS/es



## TTA ENTERPRISES

BOX 248 - WHITE SANDS MISSILE RANGE, NEW MEXICO 88002

Gentlemen:

I am presently in the Army, stationed at White Sands, where I expect to remain until I leave the service early next fall. At that time, I intend to base myself in the New York area and launch a business venture. I will be back East on leave early next year, and, if you might be interested, I would appreciate an opportunity to discuss financing with you at that time.

Before I get into the nature of the enterprise, let me give you some biographical background about myself. I grew up in this country, Europe, and Asia while traveling with my father, a Foreign Service Officer specializing in international banking and finance (now consultant to American business in Europe). In September 1961, I entered the Massachusetts Institute of Technology. The next spring, three other students and I announced a plan to import foreign-made textbooks at great savings in labor costs and distribution markup. Had we known of the extensive holdings of MIT and many prominent faculty members in book publishing and distribution, we could have predicted the outcome: expulsion proceedings were begun three days after our first announcement.

Readmitted a year later, I graduated in February, 1967, receiving a BS degree in Physics, with a minor in Industrial Management. After lengthy negotiations with MIT to acquire all rights to my Index to Science Fiction magazines published since 1950, which I was sharing 50/50 with the MIT Science Fiction Society, I supported myself handling distribution and sales of this book and various other publications full time, until I was drafted in October, 1967.

The product I will market is an ocean-worthy platform of unique design, in which the platform itself is floated 30 to 100 feet above the water's surface on four air cells. Model tank and wind tunnel tests of the design to 150 mph winds and 60 foot waves are now being completed and have been uniformly encouraging. I expect to have a complete report when I come East.

This concept has a number of advantages over competitive designs. It is far less expensive than any existing type of open-ocean construction (about \$65,000 for an 80' square platform 40' off the water, including anchoring and an industrial structure of two stories on top, or about \$10 per usable square foot), and can be built practically as large as needed. Ships, buoys, and rafts that sit on the water are sharply limited in size by the enormously increased strength that large dimensions require to withstand direct pounding by storm waves. Even smaller sizes must be massive enough to make them quite costly by land-construction standards. By keeping all rigid parts well above the surface the air-cell principle avoids these difficulties.

Although less stable than platforms built on pilings, air-cell platforms are, in normal weather, stable to the senses of the occupants, and quite moderate in pitching even under hurricane conditions. They are also much easier to move than platforms on pilings, and do not suffer from the metal fatigue problem that forced the Texas towers to be abandoned.

Construction of the prototype and other expenses during the first year or so will require an initial capital of \$100,000. If you are interested in discussing this in more detail, I would appreciate hearing from you. If not perhaps you could suggest a firm that might be interested.

Sincerely yours,  
Erwin S. Strauss

---

## THE CASTAWAY'S LOGBOOK: HOW TO "PASTUERIZE" OYSTERS

In 1966, a group of scientists working for the U.S. Public Health Service found a simple way to free living oysters of contaminating viruses and bacteria: place them in purified sea water for 24 hours – the oysters then automatically work the germs out of their systems. This will prevent the transmission of hepatitis and other ailments. Similar results were obtained in experiments with the northern hard-shelled clam. Oysters or such clams found even in polluted waters can be so "pasteurized." In addition, the virus content of a body of water may be estimated by microscopic examination of a few of its oysters.

## FISH FLOUR: A HIGH-PROTEIN CONCENTRATE

A process has recently been perfected by which a high protein powder or "flour" can be made from fish. The whole fish is group up and put through a running bath of cold isopropyl alcohol – eliminating most water and fatty content in the ground fish. Two more such washing follow in HOT isopropyl alcohol, and in them the remaining fatty substances and most of the remaining water is removed. The resulting flour-like substance has a protein rating of 80 percent, has no fishy smell, somewhat less moisture than is chemically present in wheat flour, and contains calcium phosphate and other beneficial minerals. Flour from this process has been certified "pure and wholesome" by The National Academy of Sciences and the National Research Foundation.

Studies of closed life-supporting systems for space technology indicate that the continuous culture of Hydrogenomonas bacteria, which need no light for growth, may provide an excellent food source. These bacteria convert carbon dioxide and urea into a high protein food product which is bland to the taste and has all amino acids known to be essential to health. –SKIN-N-BONES JONES

---

THE OCEAN LAB: This feature offers suggestions for research and experimentation to the aquafrontiersman. OCEAN LIVING solicits comments, reports, results, and additional data from readers.

HUBBLE-BUBBLE PIPE GILL: Air is 20% oxygen, but we use only 4% of it. Each breath of air could be used five times before the oxygen is exhausted. Sea water is 1.1% oxygen, source of this oxygen being rough waves, and seaweeds which, during photosynthesis, convert carbon dioxide, the waste of animal respiration, to carbohydrates and oxygen. It is this 1.1% oxygen which fish breath through their gills. Aquarium sand fish bowls must be aerated by pumps or underwater plants so the fish don't "drown" for lack of oxygen. Kids used to say, "How do you drown a fish? By pulling it backwards through the water so water gets in its gills," but it sounds fishy to me. About the same time they said, "For every nickel-bug (water spider) you put under your pillow at night, there will be a nickel in the morning," but I can't follow the chemistry of that one either, though it would be a useful OCEAN LAB trick if you could get it to work. The trick is that you can't pull a fish backwards through the water, and you can't catch nickel bugs. To be more practical: many modern plastics, notably polysterenes and rubber silicones, act as gas diffusion membranes, exchanging carbon dioxide for oxygen in the water while holding the water out. Inventor Waldemar Ayres breathed through such gills for an hour and a half off New York's Jones Beach. You can get a 3"x5" bonded silicone rubber membrane, with instructions, for \$575 from Edmund Scientific Co., just big enough to supply oxygen for an underwater and nest: the membrane with an ant nest for your aquarium, \$8.75. Better order their free catalog first. Mine is dated October, 1967. Edmund has nickel-cadmium batteries, thermocouples, solar furnaces, solar cells, binoculars, microscopes, peloruses, spectroscopes, weather stations, star finders, etc.

Simpler and less expensive is the gas exchange tank described in the 15 July 1967 SCIENCE NEWS, which uses the surface of air bubbles in the water as the gas diffusion membrane instead of complex plastics. Though the system illustrated is a large permanent installation, it can be hoped that smaller "hubble-bubble pipe" versions could be made for divers and submarines. A hubble-bubble pipe holds the tobacco in a bowl the stem of which points downward and is immersed in water. The smoker inhales through a tube that connects with the air space above the water. Tobacco bowl and smoking tube only are open to atmosphere, other joints being all sealed. When the smoker sucks on the tube, a partial vacuum is created in the air space above the water, and air pushes in through the burning tobacco in the bowl and bubbles up through the water. Ravenhurst Enterprises, advertising in this issue, has a white porcelain water pipe for \$8.00 and lots of other "little luxuries." In the gill version of the water pipe, exhaled air takes the route of the tobacco smoke through the water, inhaled air coming from the air pocket above the water. The trick is to get a good circulation of water without losing the air bubbles, which, like a lot of OCEAN LAB tricks, is harder than it sounds. Simpler yet, train your own dolphin, harness him, and use mouth-to-mouth respiration, I mean mouth-to-blowhole.

The "seawater-barometer/vacuum-still" described in OL #6 would make a perfect radar reflector, especially if "wings" were added to increase the reflector area. The 33-foot air column could be extended underwater in a pipe instead of aloft, making it feasible for small boats, decreasing radar range, and easing observation of the still, but such system would not be mobile. You can't make any speed while dragging a strictly vertical 33-foot mast through the water. –JAMES PARKERSON

---

## FORAGING: MALVAROTUNDIFOLIA, AN UNUSUALLY USEFUL WEED

Someone once defined "weed" as a plant whose virtues have not yet been discovered. But in the case of Malva rotundifolia – known commonly as the Dwarf Mallow or Fairy Cheese or Doll Cheeses – it is not so much a case of undiscovered virtues as neglected ones, for the edibility of the Mallow is mentioned, if in none too flattering terms, in the Book of Job. And Mallow shoots have been a popular salad ingredient in Europe for centuries – which is why the Mallow is now found nearly everywhere in this country; it followed the white man here and then went wild.

A more famous relative of the Dwarf Mallow is the Marsh Mallow – from whose roots they used to make a puffy, sweet kind of old fashioned cough drop, ancestor of the modern marshmallow candy (which contains no Mallow, but tastes the same in extract from either the Marsh or Dwarf Mallow).

## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

For the beginning forager the Dwarf Mallow combines the advantages of ease in accurate identification, wide geological scope, and great utility.

The small, green prickly fruit of *Malva rotundifolia* is its most conspicuous mark of identity, which separates it from all other plants. These are often called “cheeses” because they look in shape like those big, bulging wheels of cheese with cords dividing them into pie-like sections that often hang in delicatessen windows. What’s more, they can be plucked and eaten, right off the plant. The pie-like sectors are five in number and the prickly calyx can be removed. The whole affair is about a quarter inch in diameter. Fruits and flowers will usually be found on the plant so long as there are leaves, throughout the warm seasons.

The flowers resemble those of the hibiscus (a relative) except these of the Dwarf Mallow are smaller, and do not open as completely when they bloom. They are sometime pink, sometimes lavender, and sometimes white – varying, perhaps, with soil conditions or sub-species.

Round, running up to about two inches across, the scalloped leaves resemble in texture the rough leaves of the hollyhock (another relative). They shoot and branch out of stalks, however, which are thinner, shorter (usually up to about four feet high), and tougher.

Dwarf Mallows are found from Spring till frost along roadsides, edging fields, and in vacant lots just about everywhere in the U.S.

Any part of the plant, from the bottom tip of the root up, may be boiled in water until a tepid solution – looking in color like strong tea or weak coffee – is present. This Mallow Water, extolled in ancient and modern herbals as a near cure-all. It should be kept in the refrigerator for storage – is good for what ails you, including but not restricted to coughs, constipation (it is a very mild laxative), and chapped skin. And in a real bind, it’ll do for about a third-rate coffee substitute. It’ll also make a vegetarian egg white, when beaten in a high-speed blender.

Certainly the best tasting use of Mallow Water, though, is in combination with hot milk and a bit of sweetener (honey is best for you) as kind of “hot chocolate,” only much better.

As a spinach, it was cultivated by the Egyptians, Greeks, and Romans – and Pythagoras took time to mention the leaves of the Dwarf Mallow highly in this capacity. But, from personal experience, I would say he had a recipe different from my own – though I would eat Mallow Spinach to stay alive, I guess.

A tasty TV snack is made by simmering the “cheeses,” or little fruits, in butter and salting them. Experimentation and study will bring out many additional applications for this valuable herb. –KERRY THORNLEY

---

### ISLANDS MADE TO ORDER

An article by Norman Carlisle in the June SCIENCE & MECHANICS, the still 35¢ cents magazine with astronaut Richard F. Gordon Jr.’s Gemeni 11 flying saucer photo on the cover, scoops us all with details of seven man-made islands not previously mentioned in OL. Four are ten acre oil well platforms with derricks disguised as tall buildings in the harbor at Long Beach, California. Fifth is the Dutch Project Delta which will add 30,000 acres to the Netherlands, most of which uses dikes to hold the sea back from offshore farms. Sixth is the \$10 million mile long harbor island at Montego Bay, Jamaica, which will have four big hotels, five apartment buildings, and 100 expensive homes as well as docks, and will be cheaper than dredging out the harbor would be. Last, but not least, is the sovereign nation of Taluga, a 1000-acre tropical vacation island to be built on the Cortez Banks 90 miles off Southern California by the OSD Corporation of Seattle. The article says there are enough shallow spots off the Atlantic Coast for 30 islands with 1,000 miles of beach. Four pictures accompany the article.

~~~

ANSWER FOR SLUM CLEARING – COMPLETE CITIES AFLOAT

R. Buckminster Fuller, internationally recognized designer, suggested to the U.S. Department of Housing and Urban Development that floating cities could be an answer to a dream. Sheltered water 25-30 feet deep would support prefabricated concrete neighborhoods with areas of four acres and structures up to twenty stories high supporting as many as 5000 people, three to six such neighborhoods forming a town, with school, supermarket, stores, etc. More than 80% of our large metropolitan areas are suitably located, and need relocation quarters for poor people displaced by urban renewal. Promotion of such towns is in the hands of the Triton Foundation. – 10NOV68 San Francisco SUNDAY EXAMINER & CHRONICAL

A SEADROME AIRPORT to lessen noise problems from future supersonic and jumbo jet airliners is planned by Los Angeles, anchored in the Pacific 10 miles off the coast, it would be 5 miles long and 2 miles wide and three stories high. New York is studying a plan to surround Manhattan with circular floating landing pads for STOLs and helicopters. –US NEWS & WORLD REPORT

A SEABORNE MISSILE TRACKING STATION called Delos is being promoted by PhilcoFord Corporations WDL Division in Palo Alto, California. Still in the scale model stage, full size model would be a \$25 million double-pontooned 170-foot-square platform equipped with creature comforts for its crew (being self-sufficient for up to three months) and four 30-40 foot antennas to be used in spacecraft re-entry tracking. –13MAY68 Palo Alto TIMES

RETURN TO BIKINI ATOLL, the bomb-test island for which those shocking bathing suits were named, began 22 years after Vice Adm. William H.P. Blandy convinced its 167 inhabitants that the Americans who risked their lives to save them from the Japanese needed the islands for bomb tests to protect the peace. They were told to take inventory, but weren't given time to finish. They didn't want to leave. The land was their life. It seemed they were losing their lives by giving their island away. But it seemed to be their duty to give what they had to the United States and its people. First settlement to be on Eneu, farthest island, and they can't eat coconut crabs because they concentrate strontium-90. -HILL WILLIAMS, Seattle TIMES science editor in Los Angeles TIMES 8DEC68 "WEST," color photos by Burk Uzzle

INDIANS HAS MANY USES FOR CORNHHUSK

Indians never throw away cornstalk or a cornhusk, for they can make many useful things from them.

By using an old tribal recipe, an Indian can make a lotion from crushed cornstalks that is good for healing a cut or a bruise. He can then wrap the wound in a clean, dry cornhusk bandage.

Before the white man brought matches into the West, Indians used twisted cornhusks as lamplighters and to carry a flame from fire to light another. Cornhusks were also used as kindling to set fire to their logs.

Indian women braided husks into clotheslines. They still use husks to make tiny braided hammocks in which to carry their babies.

A skillful Indian could weave moccasins out of husks.

Indian men made corncob pipes by hollowing out a dried corncob and inserting a hollow reed for a stem. Dried corncobs were often burned in bonfires for smoking fish, meat, and hides of animals. -12Nov67 GRIT

P.S. GRIT is the weekly paper (or is it daily?) which boys sell from door to door for mad money, like Lancaster seeds, Cloverine salve, and Christmas cards. It's probably better than selling shoe shines in the park.

WATER HYACINTHS HAVE GREAT VALUE

I noticed a news article in THE TIMES the other day about the State Game and Fish Commission asking \$4.5 million to fight elodea and water hyacinths in Florida. Well, blow me down!

There also is a request that \$500,000 be earmarked for research into possible uses as animal food and gardening compost.

In India and other countries the hyacinth is considered a delicacy. They use the tender shoots principally. Seaweed and sea melons are other sources of food.

These plants make an excellent compost or mulch, depending on how and which ones you wish to use. But cattle going into the low marshes are apt eat too much and become water-logged and can't get back out of the water.

I believe that thousands and perhaps millions of dollars could be saved if the commission would write a letter or contact Charles R. Hook, Sr. Mr. Hook knows more about plant life than any man in this country. He is 82 years of age and has spent most of his life in the study of uses of various plants. His knowledge alone with that of his father before him, is available to anyone.

Making use of our water hyacinths ought to be highly remunerative private industrial business. I wonder why the compost companies aren't on the job collecting this stuff. There is gold in the water and we can't or they can't see it because of the "weeds." -D.F.K "Voice of the People," 24Mar69 Tampa TIMES

Dear Mr. Hook,

That's a pretty good reference your friend D.F.K. in Florida gives you.

We don't have millions of dollars here at OCEAN LIVING, but being able to bypass society during depressions, and just on general principles, is our main interest, so if you could write us a letter of advice, we would surely appreciate it. If a man wanted to put color photos of edible and poisonous weeds on a film strip, what books would identify them best?

Yours truly,
James Parkerson, OL skipper

DID LAMINATED-LOGS OUTSAIL SOLID-LOG CANOES?

As we use planks of laminated plywood, so the ancient laminated "logs" of small limbs or saplings, or of buoyant papyrus reeds in this case: Kon Tiki II, named Ra after the ancient sun god, a 50x16-foot canoe of reeds will sail May 15 from Safi, Morocco for South America with Thor Heyerdahl and crew of seven. Similar vessels of reed bundles operate on Lake Chad, Africa, Lake Titicaca, Peru, and Easter Island, and Heyerdahl seeks to prove that ancient Egyptians could have been the legendary "viracochas," bearded, white-skinned, highly civilized men who influenced the Incas, the Mayas, and the mound builders. Isaiah 18:2 mentions a ruler, "That sendeth ambassadors by the sea, even in vessels of bulrushes upon the waters." Exciting details in 3May69 SATURDAY REVIEW.

OTHER SEA-WORTHY NEWS: Carl Ludwigs sold his diesel repair shop in Sweden because of high taxes, paid \$25,000 to restore a 50-year old motor schooner named Eros and loaded it with \$100,000 worth, wholesale, of Swedish tools and machinery to retail in the United States. Sailing with his wife, Helga, in September 1967, after

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

1½ years they sailed into an estuary 12 miles from Puerto Penasco, Mexico, after authorities denied permission to unload, the abnormally high flood tide went out, leaving them stranded, “land pirates” stole from the boat whenever they slept or no one was there or Helga was there alone. Carl found a half-interest partner in Arizona feed them and help salvage the remains...On April 23 Robin Knox-Johnston sailed his 32-foot ketch Suhaili into Falmouth, England, having had no such port troubles as it was a non-stop circumnavigation, the first one recorded. It took 312 days...The British occupied the Caribbean island of Anguilla, which declared independence from the Federation of Nevis and St. Kitts, after a visiting British official who was forcibly deported by Anguillan and police reported takeover of the island by U.S. gamblers. The 350-man army of President Ronald Webster never materialized, and British troops are enjoying a ‘appy holiday, but Negroes contrast the invasion with evasion of Ian Smith’s takeover of Rhodesia and enforcement of strict apartheid (comprehensive, formal segregation) after its liberation by the Crown.

ESPERANTO FOR LIBERTARIANS: Libertarians speaking Esperanto, the international language, might be interested in Sennaciece Asocio Tutmonda, Paris, France, World Society of Non-nationals, a “nonpolitical United Nations,” U.S. delegate.

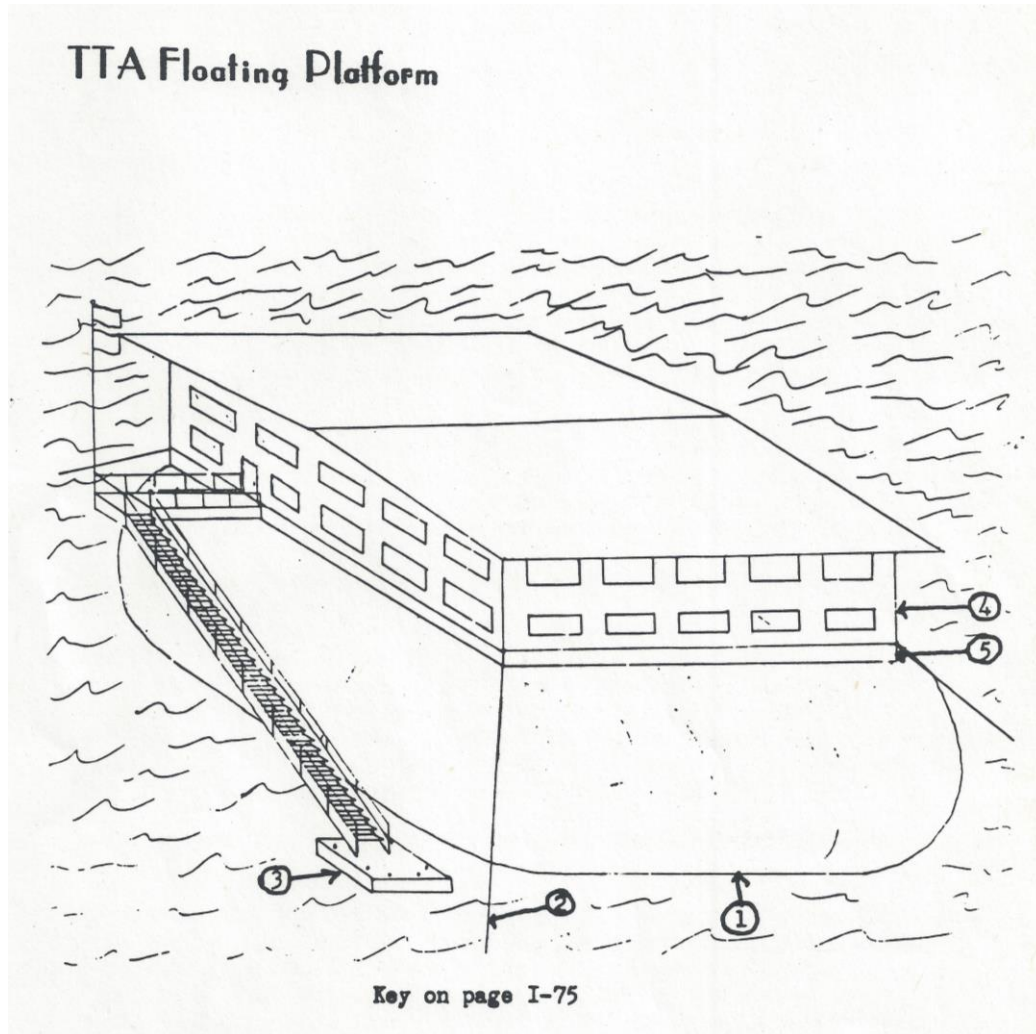
OCEAN LIVING: VOL. I, NO. 9

An information pool to help floating pioneers harvest sun, wind, wave, and sea on the last, and largest, frontier; if possible, to develop super-pioneers asea to balance tomorrow's super-society (?) ashore...

Skipper: *James Parkerson *First Mate: Kerry Thornley *Boatswain: open

Crew: *El Ray *John Wilcock *Bob Hayes *Slim Brooks *Erwin S. Strauss *Richard J. King
*Skin'n'Bones Jones

~~~~



### PROJECT LAISSEZ FAIRE

Dear Mr. Thornley,

I have just received the last issue of OL which as usual was excellent. In this issue mention is made on the June Science and Mechanics and its article on Islands. This sounds the sort of thing we are looking for as an additional appendix to the enclosed "HONG KONG EUROPE" Programme. We would deem it a great favor if you would be so good as to obtain a copy of this issue for us or failing that let me have their address by return mail. This is most important. (We will pay for the magazine.)



## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

We hope that your good self, El Ray, and the other staff at both headquarters (Innovator and OL) find the HKE Programme of interest. It has been written to appeal to possible backers with the following interests. Financial gain alone, interest in Conservation, Oceanology, Freedom, and Humanitarianism. Whether I have succeeded or not remains to be seen.

The additional enclosure on this low cost floating cement likewise will interest OL readership.

As Man's future is so inextricably bound up with the Earth, private, oceanographic, "inner space" investments such as this, are, in our view, far more likely to show an immediate, practical and applicable return, than the exceedingly costly governmental "outer space" activities, useful these might eventually prove. Like it or not our problems and future exist on this planet and it is HERE we succeed or fail.

The Programme had been extremely well received in scientific quarters so far.

Since preparing the document we have been able to secure an option on Lundy (which means Puffin Isle in Norse) in the Bristol Channel. This Island, several times larger than Monaco, is one of the few pieces of almost completely sovereign real estate left on Earth - at one time it had its own King - and would short circuit the time needed to reach PHASE THREE by several years, whilst providing an immediate, tax free expandable tourist/agricultural income.

To conclude, let me just mention that I have a most enjoyable meeting in Switzerland with Professor Ing. Georgio Rosa of Bologna last week. As you well know he was the designer and builder of the Isle of Roses.

I do hope you can help with Science and Mechanics. We will apply to reprint that article.

-IN LIBERTY,  
Richard J. King  
Crew Member, Project Laissez Faire.

### PROJECT LAISSEZ FAIRE

*Suite 130a, Ashley Gardens, Westminster.*

LONDON S.W.1

12th May 1969

Mr. K. Thornley,  
Ocean Living / Innovator,  
c/- Box 17463,  
Los Angeles,  
California 90017,  
U.S.A.

Dear Mr. Thornley,

I have just received the last issue of OL which as usual was excellent. In this issue mention is made on the June Science and Mechanics and its article on Islands. This sounds the sort of thing we are looking for as an additional appendix to the enclosed "HONG KONG EUROPE" Programme. We would deem it a great favor if you would be so good as to obtain a copy of this issue for us or failing that let me have their address by return mail. This is most important. (We will pay for the magazine)

We hope that your good self, El Ray, and the other staff at both headquarters (Innovator and OL) find the HKE Programme of interest. It has been written to appeal to possible backers with the following interests. Financial gain alone, interest in Conservation, Oceanology, Freedom, and Humanitarianism. Whether I have succeeded or not remains to be seen.

The additional enclosure on this low cost floating cement likewise will interest OL readership.

As Man's future is so inextricably bound up with the Earth, private, oceanographic, "inner space" investments such as this, are, in our view, far more likely to show an immediate, practical and applicable return, than the exceedingly costly governmental "outer space" activities, useful though these might eventually prove. Like it or not our problems and future exist on this planet and it is HERE we succeed or fail.

The Programme had been extremely well received in scientific quarters so far.

Since preparing the document we have been able to secure an option on Lundy (which means Puffin Isle in Norse) in the Bristol Channel. This Island, several times larger than Monaco, is one of the few pieces of almost completely sovereign real estate left on Earth - at one time it had its own King - and would short circuit the time needed to reach PHASE THREE by several years, whilst providing an immediate, tax free expandable tourist/agricultural income.

To conclude let me just mention that I had a most enjoyable meeting in Switzerland with Professor Ing. Georgio Rosa of Bologna last week. As you well know he was the designer and builder of the Isle of Roses.

I do hope you can help with Science and Mechanics. We will apply to reprint that article.

In liberty, *Richard J. King*  
Project Laissez Faire.

---

(Summary of the Report) HONG KONG EUROPE

A luxurious report on a luxurious project in which U.S. backers can invest, "Project Laissez-Faire," copyright 1969 by Richard J. King, has 25 large pages of text and eight photos in transparent plastic covers with plastic ring binding.

Prosperity of mini-states such as Macao, Andorra, Monaco, Jersey, Liechtenstein, Hong Kong, Taiwan, the Bahamas and Luxembourg is dwelled on, as well as Puerto Rico's ten year tax relief boom.

Specific areas illustrated are Freeport, Bahamas, which a Mr. Wallace Groves converted from an unwanted island to a luxurious 20-year tax free paradise of freeways and skyscrapers, all within 6 years; and Hong Kong, the "jewel of the orient," where prodigious economic expansion comes from 19<sup>th</sup> century "free trade law and order."

Failures noted are the Free Airport of Shannon, Ireland, which falters because of shortage of skilled personnel, distance from markets, poor communications and accommodations; and Malta because of interference from the government and from important families.

Pilkington's Sea City is illustrated, as well as Buck Fuller's complex.

The report says recognition would depend on avoidance of hostile powers which would shoot their way into power, Mafia-type elements and wanted criminals, drug and gun and other smuggling, and radio interference.

Profitable activities listed for sea projects are: tax haven, tourism, gambling, retirement, company registration, uncensored publishing, banking, transport center, research, ideas haven & arts center, private education, warehousing, communications center, conference center, medical research, religious center, entertainment center, oil, flags of convenience for ships and yachts, jet seadrome, stamps and coins, stock exchange, "royal" titles, advertising, sports, horticulture, American business, fish farming & aquaculture, entrepot (international ocean depot), sea salt & chemicals, nuclear energy center, gas fields, oil refinery, dry dock and ship construction, and fresh water production.

---

## CONCLUSION

"Laissez Faire is an entirely new concept in nations, in research projects, in free ports and in liberty. It is our belief that the urgency of man's problems demands an entirely new approach in a new environment where private initiative can be brought to bear so that they may be resolved before it is too late.

"We ask you to join with us as a shareholder in this profitable yet humanitarian investment in man's future. It is only capitalism working within a climate of complete personal and economic liberty that is likely to produce the answers in time; answers that will be profitable, not only financially, but in the improved freedom and quality of life for all mankind."

This report is a classic and should itself, in a cheaper edition, sell at a profit.

---

## WILL CONCRETE SPONGES FILL THE VALLEYS?

William Williams is a Welshman who wants to fill entire Welsh valleys with concrete sponge. A million pounds worth of concrete could hold as much water as a reservoir behind a £14 million dam, he claims – and the top could be covered and used as farmland.

This is just one of the more way-out ideas Williams has for exploiting the 12 years and £200,000 he has spent for developing a process for making lightweight concrete. Now the process is ready and he is looking for the backing to launch it on a major scale. "If I don't make £1,000,000 out of this, I'll eat my hat."

Working in the Sussex Village of Catsfield, near Battle, Williams and his son Guy have designed and built a machine which produces a continuous flow of aerated concrete. It is done by adding a very fine bubbled, long-lasting foam – rather like the stuff firefighters use – into the mix so that the concrete ends up with a microscopic porous structure.

This was, Williams claims, he can make concrete of any density he chooses down from the normal 150lb. per cubic foot to as little as 10lb. per cubic foot. Since full density concrete is actually much stronger than builders need for many purposes, this makes it possible to cut costs by saving weight and material.

Firms like Laing and Costain already have processes for making lightweight concrete. Williams believes his is unique in being able to produce and pour a high quality product of any density from a mobile plant.

He has already won a small contract from the local council for a car park at Battle, where he will be pouring lightweight concrete at 65 shillings a cubic yard compared to a normal charge of around 95s. for just delivering ready-mixed concrete. And he has made about 150,000 lightweight bricks and several hundred concrete lintels.

The bricks are very easily produced by making foam barriers in the concrete before it sets and then "tearing along the dotted line so to speak." The lightweight lintels are actually stronger than conventional ones because they have less weight of their own to support. And Williams says the physical properties and water resistance of the concrete are entirely acceptable – it is only at the very low densities that it soaks up water like a sponge.

Williams does not plan to become a concrete contractor though. He and his son have formed a company called Brixite which will concentrate on building the mixing machines – only five have been made so far. Williams estimates he needs £100,000 capital – enough to build 100 machines – to make a really serious assault on the market.

But there is no stopping the Welsh ex-architect when it comes to ideas for potential outlets. Besides the sponge-reservoir scheme he talks of building floating cities and projects for drainage, irrigation, and filling gravel pits – "cheaper than earth." –newspaper clipping from Richard J. King

---

## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

CARBONATED beverages foam when they are uncapped releasing the pressurized carbon dioxide. Why couldn't pressure differences in the sea be used to foam magnesium, plaster of Paris, and other sea minerals? Gasses would be added to the plastic material in deep, high pressure water. As they are raised, the gas expands foaming the material before it sets solid. Foamed material is lighter and goes farther. Semi-circular bricks might be made thus to build vertical cylinder base-floats, the most stable floats for rough water, water/salt-proofed by plastic film, pain, or fiberglass.

---

[LETTERS DEPARTMENT]

SAILING STREAMLINED "ICE-FLOES"

Dear Mr. Parkerson:

Thanks for #4-9 of OCEAN LIVING. I guess 1-3 are all gone? Enclosed is a check for a subscription.

There was an article in TRUE magazine about ten years ago which might be of interest to OL readers. It was called "The Ozzard of Whiz" and was about an inventor, circa World War II, who designed a ship's hull of frozen water-soaked wood chips. It was cheap, easily repaired, and had high impact strength. The wood was an excellent insulator and there was a refrigeration unit in the hold. Repairs could be made (above the water line anyway) by simply spraying on wood and chips.

Sorry, but I don't remember the exact issue. TRUE isn't indexed in the Reader's Guide to Periodic Literature, so anyone should write directly to TRUE for the date.

Regards,  
Edwin H. Huser  
Teaneck, New Jersey

~~~

PLASTIC SHEETING GOES TO SEA

Dear Mr. Parkerson,

You mention that Sears has black 10 mil polyethylene for \$48.25 per 20' x 100' roll. The L. Richard Co., Inc. has the same thing for \$29.10 FOB Chicago. Shipping would run about \$20 per roll to LA, so find out if you have pay any shipping at Sears. If so, L. Richard could be the better buy. In quantities of 25 rolls and up, they charge \$25.60 per roll, delivered in the US, so in figuring cost for large quantities, that would be the figure to use.

What's better than a soldering iron for welding poly is a Teflon-coated iron – a regular clothes iron like you get from Sears. It produces heat over a wider area, making for a stronger bond, at a more controllable pressure, lowering the likelihood of poking through. While I wouldn't recommend unprotected poly for whitewater kayaks, it could do a quite respectable job on the open ocean, where the probability of encountering a sharp solid object at high speed is small. It should really be outstanding for emergency/survival use, or where cost is an important factor.

Sincerely yours,
Erwin S. Strauss
White Sands Missile Range, New Mexico

~~~

JET AGE COMPOST IN 5 TO 6 WEEKS

Dear Mr. Parkerson,

I am Mr. Hook's daughter-in-law. Dad is 85 now, in good health, but I help him with all his writing and fan mail. He had written for AMERICAN ASTROLOGY Magazine since 1939. I am sending you a May issue to acquaint you with what he is writing and also a copy of his Jet Age Compost Page (telling how to quickly convert plant matter to compost using black plastic, Alaska Fish Fertilizer, Micro Fertosan bacteria, and Swedish seaweed, latter two available only from dad for \$3.00 post-paid), which is free for a self-addressed stamped envelope. His interest is wholly in lunar, organic gardening. If you have any questions, please do not hesitate to ask. Do you want some general article on lunar, organic gardening, at no cost?

Sincerely,  
Cora D. Hook  
Charles R. Hook, Sr.

---

AQUA-LIBERTY AND THE POLITICAL STATE: A PERSONAL OPINION – BY KERRY THORNLEY

John Birchers and members of SDS, suburban Republicans and psychedelic dropouts, people with many political convictions and people with none probably number among the more than one-hundred subscribers to OCEAN LIVING. I hope so, anyhow – because one of the things I like best about the idea of fleet-type floating communities is that it makes the old political divisions obsolete. When people with different opinions as to what sort of society is best are not trapped, geographically, together in the same political ward – when any citizen can at any time just haul anchor, without vast inconvenience and economic sacrifice – then most of the old issues become much less important.

Ocean life, however, is not a form of escapism from the problems of our day – it is just an opportunity to confront them from a fresh angle, along what would seem to be more practical lines. Those who don't want to pay taxes to support fat bureaucrats and less professional parasites can jolly well quit. Those who are concerned over the population explosion can make more room for others on the land and start feeding themselves from the sea. People who've just had enough of the urban rat race can step out and bring their lives under their own control. And kids who want to smoke a joint now and then without thinking about cops and nightsticks and jails (while senators and presidents make decisions every day under the influence of alcohol), can get high in peace on the high seas.

But with these issues and others like them out of the way, we are not free to forget about politics. For every day, in every way, the major political powers of the world are pouring more and more money into the sea. Projects range in scope. The U.S. Navy is training dolphins to go unsuspectingly on kamikaze missions against enemy ships (which seems to me a hell of a way to strike up an acquaintance with what might well be the only other highly intelligent lifeform on the planet). The Navy is also doing research on the possibility of "bugging" the oceans of the world so that, by sound, it will be able to know what exact location of all ships at all times – not just Navy ships; all ships. Meanwhile major oil companies pollute the sea beyond the continental limits with the special sanction and protection of, inexplicably, the U.S. Department of Interior. And, the world over, spokesmen of this or that government call for an international ocean-going police force – not out of concern over pollution so much as fear that 'pirates' in the North Sea will beam rock music into England over the airwaves or that the small submarines available for private ownership in the future will be used to smuggle American magazines into the U.S.S.R or tax-free cigarettes into Spain or used car parts into Mexico.

The only thing that keeps any single nation or small block of nations from annexing the high seas, in fact, and declaring them government property, is the knowledge that all the other nations want to do exactly the same thing and would fight anyone who tried it first. And since there is plenty else to fight about just now, the oceans enjoy a free status, of sorts, and will continue to do so, probably for many years or decades to come. But, unless the major powers manage to destroy themselves in the meantime (through economic upheaval, internal disputations, or big wars), there's going to be a showdown, sooner or later, over who gets how much of what ocean resource.

I don't think it is too soon to start thinking about this – because what people do in one decade or century often exerts a profound influence over what happens in the next. And many people, however powerful, who are just holding things together from one minute to the next are no match against a few people, who know exactly what sort of conditions they want, in the long run, and what must be done to bring them about.

So I think we should start discussing this subject on an informal basis. What DO we want? What MUST be done?

I'll offer what few ideas I have in our next issue. I hope some of our readers will join me.

#### FIRST CIRCUMNAVIGATION BY TRIMARAN

Michael Kane, who didn't even know what a trimaran was when he got out of the Marines in 1965, has become the first man to circumnavigate the world in one, his 40-foot long, 22-foot wide CAROUSIN' II. "I've been living on beans and peanut butter for two years, not my cup of tea," he said. "It's all up hill from Panama, against the wind and the sea." He visited 28 ports in 10 countries during his 22 month argosy. Crewed 24 men and 9 women who were useless at sea and didn't break his 15 hour per day "certified monk helmsman" routine with any carousing, his cat, Thunderball, providing more excitement by catching flying fish. They weathered five gales almost capsizing in the Gulf of Tehuantepec. –26May69 San Diego UNION UPSETTING THE ECOLOGY

A good example of the hazards of upsetting the ocean's delicate ecology came to light a couple of years back in Australia when it was discovered that the Crown of Thorns Starfish (*Acanthaster planci*), which feeds on coral polyp, destroying the coral, had multiplied in such numbers that the very existence of the Great Barrier Reef, a major tourist attraction, was threatened. Biologists speculated that a decrease in the number of sharks – the only things known to eat adult starfish – had caused the menace. Further, many cases of food poisoning from eating normally edible fish were reported, as the fish became toxic, it was guessed, from feeding on algae which had colonized the dead coral rubble, left by polyp-foraging starfish! Similarly, sea urchins, their lives lengthened by eating sewage which should be converted to sludge, threaten California's commercially valuable forests of giant kelp.

#### RAISING FERN SPROUTS FOR VEGETABLES

There is a growing interest in using young fern sprouts as food, particularly those of pasture brake and ostrich fern, which are available from seed and plant firms and nature.

If you want to obtain your starts from Mother Nature instead of a business, take up some of the vase-shaped crowns which are formed at the tips of the rootstock branches and set them in rich soil to root and grow. Purchased starts are treated the same way.

The newly unfolding fronds are often called "fiddleheads" because of their shape. They can be cooked as a green vegetable or mixed with oiled or buttered bread or cracker crumbs, milk, egg, and seasonings for a casserole.

For cooking, the fiddleheads must first be washed thoroughly, and all the hard stalk-bases and scales removed. When boiled or steamed with a liberal amount of salt as a green vegetable, they are drained, seasoned with more salt if needed and with pepper, and served either on toast or alone, with plenty of oil, butter, cream, or a cream sauce.

Fiddleheads can form the basis of a substantial meal, as they are rich in protein. Just two or three large crowns will provide enough for a meal for an average family. The flavor is distinctive, resembling asparagus or spinach. Ostrich ferns have even been canned commercially.

## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

Ostrich fern fiddleheads have long been popular in New Brunswick, though it grows from coast to coast in open swampy woodlands or water edges, in sand or mud, but with some sunshine. Plant in similar environment not too near the house, as once established it tends to be aggressive. Harvest in May (June or July, if cold).

Flavor may be enhanced by covering the young sprouts with mulch enough to blanch them, but not to stifle them. – RICHARD L. HAWK in 22Oct67 GRIT, Sent in by Helen Harmann

(Large (3x6") Pokeweed roots so treated supply perpetual sprouts, EDIBLE PLANTS OF EASTERN N. AMERICA says.)

---

### RIVER TRAIL LEADS TO VACATION FUN, WILDERNESS ADVENTURE

The "river trail" is a pathway to new adventure for many vacation-minded Americans. This summer they will board rugged rafts and ride through the wilderness heartlands of North and South America. For these everyday people there are no traffic jams or crowded campsites. There is only pristine wilderness, the timeless flow of current, and the drift of thought.

Sponsored by the American River Touring Association, river trips for 1969 provide unique opportunities for people of all ages to enjoy rare and beautiful wildlands accessible only by raft. Adventures in the U.S. include voyages down the Grand Canyon of the Colorado River that celebrate the historic journey of Major John Wesley Powell in 1869. Other outings include the Middle Fork of the Salmon River in Idaho's lush and mountainous Primitive Area, California's Stanislaus and American rivers in exciting Sierra Gold Rush Country, and the Rogue River in the beautiful Siskiyou Mountains of Oregon, where trip members may either camp or take lodging in rustic fishing lodges along the river.

Raft trips abroad include the headwaters of the Amazon River in Peru, Lake Atitlan in the scenic mountain jungles of Guatemala, and Australia's famous Great Barrier Reef. For further information contact the Association's Oakland office.

Each river adventure is designed to meet a variety of vacation needs. Activities range from swimming, fishing, and biking to sporting "white water" runs or just drifting lazily downriver. Overnight camps are located at scenic sites along the shore. Trained boatmen, ARTA guides are equally skilled as trailmasters and camp chefs. Their neoprene rafts assure safety and comfort for all.

---

### A MARINE BIOLOGY READING LIST

\*Buck, Margaret W. *ALONG THE SEASHORE*. Describes many plants and animals to be found along the Atlantic, Pacific, and Gulf coasts. The life history of each kind of animal is given.

\*Selsam, Millicent E. *SEE ALONG THE SEASHORE*. Answers questions that arise when a child goes to the seashore, and suggests some things he can do while there.

\*Zim, Herbert S. *SEASHORES: A GUIDE TO ANIMALS AND PLANTS ALONG THE BEACHES*. A comprehensive guide for identification. 458 species in full color.

---

### TTA FLOATING PLATFORM

Today is a low pressure age. Large diameter "Terra Tires" by Goodyear that carry heavy loads effortlessly across rough, loose terrain have such low pressure that they can run over a man without hurting him; and "Gems," or "Ground Effect Machines," dispense entirely with the tire, using air compressors to maintain pressure enough in a "skirt" under the vehicle to support heavy loads over land or water; and blowers support large plastic tents instead of poles and guy ropes, not to mention rubber life rafts which survive metal planes and ships. Now Erwin S. Strauss, B.S. (MIT physics), fights air with air, fluid with fluid, using big, low pressure bubbles of black polyethylene kept inflated by two 100 horsepower Diesel blowers to support the TTA Floating Platform shown on the cover – in 80-foot water, 125 mph winds, and 60-foot waves, free of wave pounding and metal fatigue. Key to the drawing: 1. Skirt to hold air cells under platform; 2. Mooring ropes to hold platform to anchors; 3. Dock and access stairway, hinged at top to allow dock to float freely; 4. Building. Dimensions: 80'x80', 20' to 25' high; 5. 80'x80' platform. Individuals, groups, or clubs interested in collecting \$100,000 for the prototype, or more details, please contact the inventor: Erwin S. Strauss at TTA Enterprises.

---

THE OCEAN LAB – FREE POWER AT SEA: Plans were printed for a battery charger running an auto-generator with a ½-hp electric motor, and subsequently a reader made a bicycle-exerciser running generator current through a rheostat to vary the resistance. A boat propeller might be connected to a generator to provide electricity under sail, which would add drag of course. A small motorcycle or bicycle generator would cause less drag. Alternative current generators, like bicycle generators, will operate lights but not charge batteries unless rectified. A good 12-volt wind charger is available from Dyna Technology, and a 6-foot 2x4 can be shaped into a propeller to run an auto generator. Wind chargers might be used at sea when anchored or sailing to windward, but would add drag and vibration. They couldn't be used on the long, downwind, tradewinds runs on which sail boats commonly operate, because the sail blankets what wind is not absorbed in propulsion. And how about swinging flywheels of concrete and black sand run by pawl racks? Swing must be strong enough to overcome gyroscopic effect, perhaps transmitting it to the hull resulting in "power steering by gyrocompass." A solar energy engine is described in the July 1965 *POPULAR SCIENCE*, but it wouldn't put out ¼ hp. New external combustion steam engines, using a refrigerant instead of water, can be run by any heat source: solar, pampas-grass-alcohol, charcoal, hydrogen, etc. Water is 11% hydrogen, the chief fuel, which can be removed by electrolysis. It's a shame hydrogen in water can't be treated like oil in the ground, oil wells being "perpetual motion machines" whose output far exceeds their intake.

Then we could make “flying saucers” with “flying donut” rotors which put the roomy, high speed perimeter of the circle to better use than conventional helicopter rotors do, using models to take “security photos” and full size ones for fun, reconnaissance, mobility, etc. –JAMES PARKERSON

---

THE CHART ROOM: Far away places have their allure, but sometimes right under your nose happens to be the place to look for uninhabited islands suitable for stopover use by the aqua-libertarian. 22 of the 23 Apostle Islands clustered at the western end of Lake Superior, spread over a 600 sq. mile area and ranging from standing room only to 13,000 acres in size, fit this bill. Only one of the Apostles, Madeline, has a settlement: La Pointe, a one-block town with a fine marina. If you lived in this part of Wisconsin, you could probably have a secret supply cache and your own private camp ground within a few hours sailing – available for weekend retreats or emergency living. These lands were originally taken away from the Ojibway Indians. During prohibition the local sheriff used to keep the bootleggers off Madeline by sinking their boats. According to an article in the March 1969 issue of BOATING, the limpid lake water is drinkable. But sudden squalls are common and the cold water can immobilize a swimmer in minutes, so watch out for dark skies. Natural harbor on Rocky Island. Devil’s Island has extensive and deep caves, but is “owned” by the Federal Government which maintains a lighthouse thereupon.



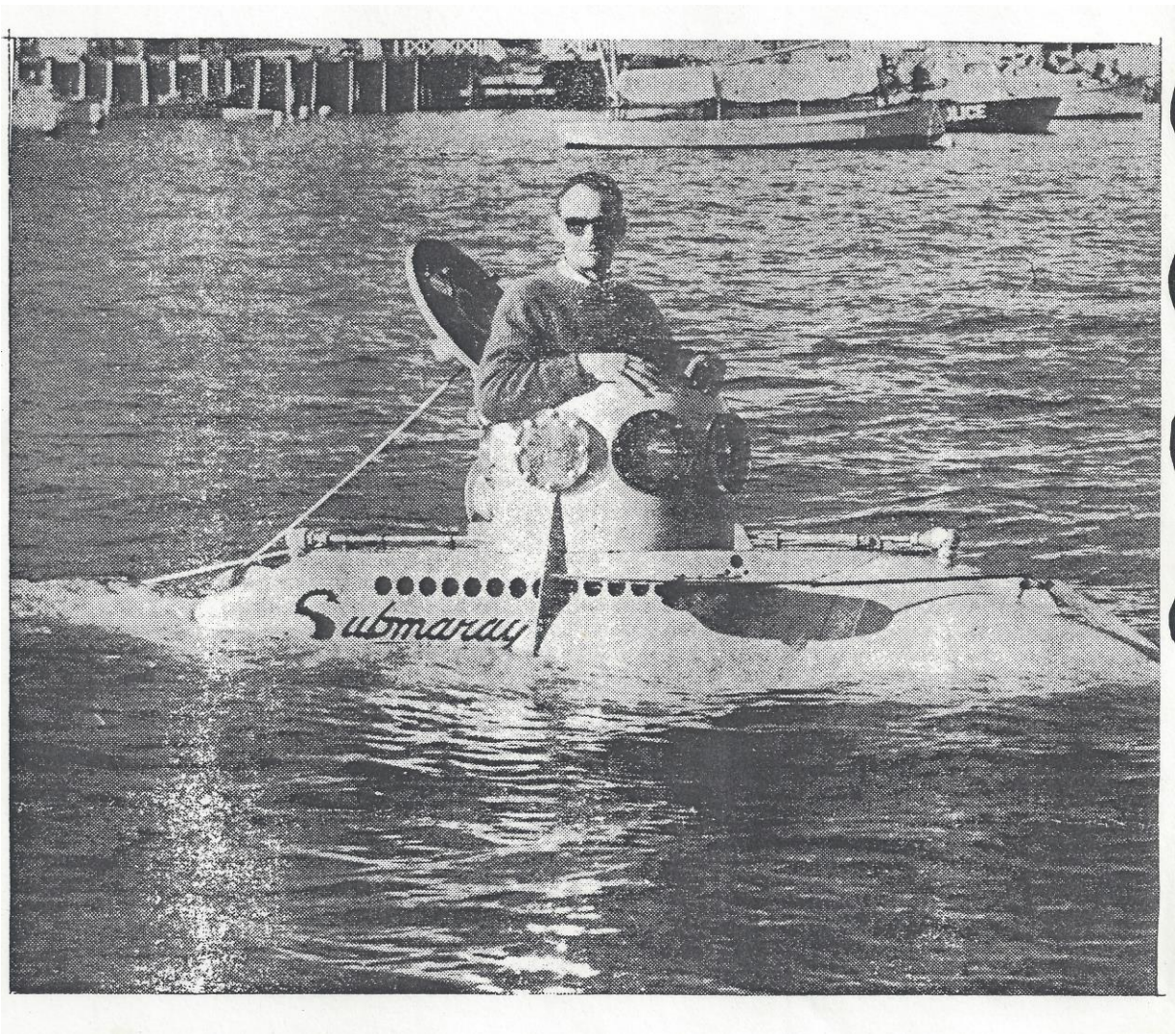
## OCEAN LIVING: VOL. I, NO. 10

An information pool to help floating pioneers harvest sun, wind, wave, and sea on the last, and largest, frontier; if possible, to develop super-pioneers asea to balance tomorrow's super-society (?) ashore...

Skipper: \*James Parkerson \*First Mate: Kerry Thornley

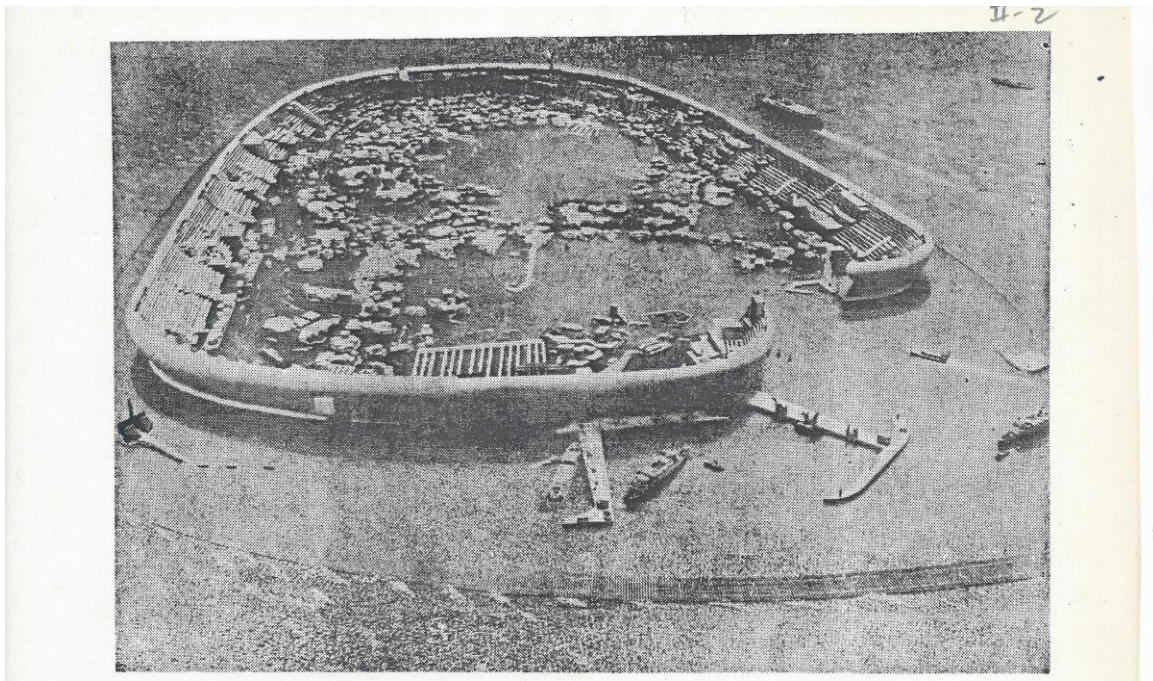
Crew: \*El Ray \*John Wilcock \*Bob Hayes \*Slim Brooks \*Erwin S. Strauss \*Richard J. King \*Skin'n'Bones Jones

~~~



FISHERMAN'S PARADISE

In case we run out of land areas, we can live – where else? – on the surface of the sea. The imaginative concept, shown in this model, was developed by a British group and unveiled recently at the London Hilton by Minister of Technology Anthony Wedgwood Benn. It's an intriguing idea. After all, many sites on land are far more inhospitable than the ocean. This plan embraces a self-sufficient community of 30,000 living within a 180-foot-high city wall protected by a floating breakwater (foreground). Such an installation could be built in any of the shoal waters that exist over 10 percent of the ocean's surface. Basic housing would be on terraces on the wall's interior. Floating islands would carry public buildings. Supply ships would berth in the outside moat of calm water.



WANT TO CHARTER THE "SUBMARAY" SHOWN ON THE COVER?

The man to contact is Mark Toggweiler, ex-Navy architect who built the 14-foot 3,200 pound sub of ½ to 3/8 inch steel plates for \$30,000 in his garage in Long Beach, California. It has made more than 400 dives during its five years without one accident. It cruises for 5 hours at 3mph with two men aboard by battery power, to depths of 300 feet. Submaray has hunted sunken planes, inspected oil pipelines and sewer outfalls, taken a submerged timber survey at Seattle, studied fish movements for the U.S. Bureau of Fisheries, starred in the McHales Navy TV show, and hunted treasure, finding a couple of promising piles of rounded ballast stones like those used on Spanish galleons. The Submaray works from the tender, Maray, when on charter. Charter rates are not given in the article by Maury Beam in the "Leisuretime" supplement of the August 27 Santa Ana REGISTER, but 44 Del Ray advertises special weekday rates of \$4 per hour for 13-foot sloops, so figure up (way up) from there.

FISHERMAN'S PARADISE shown on page II-2 is from the same paper. It is Pilkington's "Sea City: Sun Trap on the Dogger Bank," described in OL #8.

~~~

#### STRIKE THREE IN THE SEARCH FOR PARADISE BY THE RICHARD AULTS

Richard Ault, 30, his wife, 27, and their 4-year-old daughter, Tracy, flew recently from Los Angeles to Tonga where they will board a small sailing vessel for the 85-mile sail to tiny Ata Island where they will "make a break from the bonds of our society and live off the land for a year on an uninhabited island." In 1967 they spent their \$2500 stake in Hawaii trying unsuccessfully to get transportation to Suvarov (of Tom Neale's AN ISLAND TO MYSELF, reviewed in OL #8); last July they sailed for Suvarov from Coos Bay, Oregon, with an Italian sea captain, but the New Zealand government wouldn't let them land. So this will be strike three for the Aults. Let's hope they make it and don't starve or drown. Any OL readers sailing past Ata Island 85 miles south of Tonga might check in on them. -Santa Ana REGISTER

~~~

36-FOOT SLOOP "ADVENTURE" DETAINED BY CHINA

Bill and Carol Hanke, Newport, California, teachers, in June 1966, took a ship to England and bought a small car there which they drove to India and sold. Then they traveled by every means from shanks' mare to airplane to Hong Kong where they bought the sloop, Adventure. On March 18, 35 miles off China, two big motorized junks with about 40 heavily armed Chinese accosted them. The Hankes made peaceful signs, and when Bill jerked Carol's parka back showing she was a girl, they escorted them to Pinghoi, where they were detained and the boat searched for 8 days before release. They sailed to Okinawa and cruised Japan's Inland Sea for six weeks before coming home. Details in August YACHTING. Reported in THE REGISTER.

~~~

#### DROWNED MAN IS FINED AND SENTENCED

## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

George Frederick Knoop, 34-year-old machinist who rented some SCUBA equipment and then disappeared in the Lake Mead near Las Vegas in 1964, was arrested last January in El Segundo and was living in Inglewood under the name of John Deviland only a few blocks from the mother and sister who collected insurance and social security benefits from his death. He pleaded guilty on three counts in June and was given the maximum 30-year sentence, commuted to five years probation and a \$2,500 fine after a 90-day psychiatric study.

These clippings and two on page II-4 supplied by: --STEVE BURRIS, Costa Mesa, California

~~~

RADIO FREE AMERICA OVERDUE OFF LONG BEACH

Lawrence Lipton, author of THE HOLY BARBARIANS and THE EROTIC REVOLUTION and the RADIO FREE AMERICA column in the Los Angeles FREE PRESS*, an "underground" weekly, reported that Radio Free America would start broadcasting an "underground type of programming, presenting information that is suppressed, managed, or censored by the mass media" on a vacant AM frequency from a 90-foot foreign flag vessel anchored in international waters off Long Beach last September 1, but except for "a loud clear test signal that blanketed the entire Los Angeles area" which Lipton reported, we haven't heard from Radio Free America. What became of it, and what is this "106 FM Adults Only KWST" station advertised on bus stop benches?

~~~

### FARMING-IN-TUBE REPORTED

"Agro-Culture," a simple, but amazing new development in the world of agriculture that can grow almost anything in any location, the brainchild of John E. Goldring of Pebble Beach, California, should be doing business by now in Victoria, British Columbia. Basically it consists of a tube which can be placed almost anywhere and uses 10 to 15 percent of the water used in normal irrigation. The tube, made of tough paper covered with plastic, is about 8 inches in diameter and has a smaller tube inside. One end is heat sealed and the other is attached to a plastic pipe through which water and liquid fertilizer are injected. The outside tube is filled with peat moss and nutrients and has small holes on top in which seeds are planted. Water and liquid fertilizer filter through the inner tube into the peat moss. Goldring knows the idea works having harvested good tomatoes, lettuce, and flowers. - 16March1967 Monterrey (California) HERALD

~~~

ELECTROLUMINESCENT LIGHTING

For lighting on board or elsewhere or electroluminescence is really where its at. It will (I'm working out the final bugs now) be able to be applied by spraying epoxies on any conventional or curvilinear form. For example let us say that you spray a layer of aluminum or copper paint (both conductor reflectors) on a wall (or floor, ceiling, etc.) of previously sprayed polyurethane foam (rigid) or polyvinyl (or even ethylene); over that layer you would then spray or paint a layer of phosphors pre-mixed into a clear epoxy; then a clear conductor (metallic suspension system epoxy or polyurethane gloss based); finally (if you don't enjoy shorts and shocks) a clear non-conductor - same good old plastics. Spray or pain on. WHAT A SCENE: because you can then attach a high voltage (around 400 volts, 1,000 cycles AC current) to the layers (one wire to the aluminum or copper, the other to the clear conductor) and modify-regulate that current with any control unit. For example an almost infinite color organ (the Hz of the current will determine the color since certain phosphors emit different colors at different frequencies), feedback room with tape stereo, EEG (my work is with ECT-environmental conditioning therapy using closed loop EEG GSR feedback systems - I'll send you the report paper as soon as it is written up completely) or any other input using proper transformers, etc. And then there was light...

Much peace and success,
Robert Bomn

MARINE ZOOLOGY READING LIST

*Fenton, Carrol. WILD FOLK AT THE SEASHORE. Day 1959. Sea Gulls, snails, barnacles, starfish, squid, lobster, crabs, seals, sea lions re included in this well-illustrated book.

*Freuchen, Peter. STORY ABOUT LIFE IN THE SEVEN SEAS. Messner 1959. Life in the sea is shown in all its aspects: population, food problems, intelligence, courtship and reproduction habit.

*Jacobs, Lou. WONDERS OF AN OCEANARIUM; THE STUDY OF MARINE LIFE IN CAPTIVITY. Golden Gate 1965. A brief text and many outstanding photographs give an inside view of Marineland of the Pacific in California.

POSITIVE FLOTATION OBTAINED BY FOAM

Innovation often holds the key to the solution of industry's mechanical and engineering problems. This was the case in seeking a means of assuring positive flotation for an offshore drilling platform being built at Orange. Its tanks, 30 feet in diameter, contain a flotation filler between the outer tank and the inner tank. Cook Pain and Varnish Co.'s Coro-Foam was used as the filler. It also acts as a seal, preventing water from entering the tank.

The company's foam is composed of two basic ingredients which when mixed together may expand as much as 30 times its original state. It has been used in several similar installations as well as in barges and other vessels where positive flotation is essential and to insulate a huge liquid propylene tank to help maintain a temperature of 54°F. It can be injected into the hull of a sunken ship. When it expands to more than 30 times its original size, it can force water from the hull, enabling it to be raised to the surface.

THE 5 ½ MILLION SQUARE MILE HARDLY INHABITED ISLAND

Back in OL #5 we gave International Flag Codes to be used by yachts in making harbor and in describing the state of their water and provisions, from the U.S. Navy Hydrographic Office Publication No. 87. Recently we received another Navy publication for review which may be of interest to aqua-libertarians: POLAR OPERATIONS, by Captain Edwin A. McDonald (Retired).

Here, accessible (?) from all oceans, is a continent containing one-tenth of the world's land area and a small scattering of international inhabitants in about 30 bases owned by 11 countries, having a status much like the moon's or the ocean's, meaning that the camp belongs to whoever's flag is flown. Why couldn't some non-national colony or cult of skiers or snowmobilers set up camp under a new flag in a vacant snow drift?

If you want to start an Antarctic colony, or on ice floe colony, or prospect for gold in Alaska or Canada, or write about these areas, then POLAR OPERATIONS will, in ten exciting chapters from The Environment to Safety and Survival, give you the complete picture, including the ice breaker ship maneuvering as well as small prams and ice-phantom sledge boats.

The Antarctic map on page 27 keys the 5 types of ice from "generally accessible to unreinforced vessels in southern summer" to "Pack Ice in all seasons," and the page 28 map locates all bases, 6 belonging to the U.S., 6 to Argentina, 5 to the United Kingdom, 4 to Russia, 3 to Chile, 2 each to Australia and New Zealand, and 1 each to France, Belgium, So. Africa, and Japan.

Capt. MacDonald winds up the book with emergency ground-air visual signals, a good glossary, and a good bibliography.

BUILDING A MAN-MADE ISLAND

Another man-made island is to be built in the Adriatic, one mile offshore from Rimini. It will sustain a 100-room hotel and is expected to be completed by summer, 1971. The entire construction is to cost about \$516,000.

The builder is Georgio Rosa of Bologna, who first began experimenting in open-seas construction in 1964. Last year, he built another island off Rimini, a little more than a quarter of a mile outside territorial waters.*

The structure caused some farcical bureaucratic agitation along the placid Adriatic and even greater agitation in Rome, which finally ordered the island to be wiped off the face of the waters.

Rosa had leased his concrete and steel platform to a private company, which planned to open a far-out nightclub there. Italian authorities, even though the island was in international waters, decided it was threat to "national security." After a prolonged sea blockade employing dozens of coastal police, the leases were forced to abandon both their island and their plans. The structure was destroyed with some difficulty, last spring by frogmen.

The owner's only compensation, so far, has been the satisfaction of seeing that his first attempt at island-making proved that his was tougher to demolish than some of nature's islands. He is suing for damages, and the state is suing him for expenses involved in the demolition. The case may be resolved at the International Court in The Hague.

Since this new island will be within Italian waters, Rosa and his partners are following the usual bureaucratic routine in seeking a building permit. The Rimini authorities have before them now a formal request for "temporary concession, for a period of 30 years, of a sheet of water measuring 1600 square miles (17,216 square feet, lying within the territorial waters, about 1 mile from the shoreline, between Rimini and Riccione, for the construction, on a platform of reinforced concrete, of a hotel for the tourist trade."

The new hotel will have three stories and will have a swimming pool and a heliport, as well as docking facilities. It will cater to tourists of moderate means. Rosa has another project for a hotel off the Algerian coast, which, he says, will be of "the Aga Khan type."

P.S.: Tourists who can't wait for Rosa to create his island can rent the entire, old-style island of Monte Cristo (minimum: a one-month lease), according to notices in the local newspaper. The 4-square-mile island, once the property of the Italian royal family, is uninhabited except for friendly goats and the serving staff (presumably also friendly), which is included in the rental fee.

—GEORGE ARMSTRONG (Manchester GUARDIAN)
—21Sep1969 Washington POST (Erwin S. Strauss)

*This was "Inuslo de la Rozoj" (Island of the Roses) which used Esperanto, the international language, as reported in previous OL's.

ARTIZONA UTOPIA FAILS

The attempt of a University of Arizona instructors and Tucson professional people to form a utopian community at Oracle, Arizona, has fallen into terrible, perhaps fatal, difficulty. Ten months of communal living at Rancho Linda Vista have brought four divorces and searching personal re-evaluation among the 30 adult members of the community.

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

In recent months, a dozen or so "communes" have cropped up in California, Arizona and New Mexico, particularly around Taos, but the group from Tucson was generally older and better equipped financially than the others.

The communal store, telephones and livestock largely have been given up because of cash deficits or unwillingness to work. Communal eating in the central lodge is infrequent, and income-pooling and inter-family communal living have been reviewed but not accepted.

Yet they speak of establishing a children's school or adult art center so members can quit Tucson jobs and work at home.

Eight members put up \$1,000 each to make the down payment, and rent money from the others keeps up mortgage payments on the \$67,500 sale price.

"There's a lot of talk about many things, but there are few things people really want to work on."

NATION BUILDERS: Cortez Development Corporation of Bellevue, Washington claims it has \$2.1 billion in private financing "all worked out" for Taluga, a manmade island nation it plans to build 100 miles off the Pacific coast of Mexico. When completed, the new nation will offer, among other allures, a tax haven for 5,000 corporation, its developers say.

On 27June69 the Pentagon announced that it will burn 12,643 tons of poisonous mustard gas, in lieu of its original plan to dispose of this and 14,000 additional tons of obsolete chemical munitions by dumping into the Atlantic Ocean. The recommendation that the deadly materials be burned, instead of used to spike the sea, was made by the National Academy of Sciences.

An exhaustive study completed in 1965 by Drs. G. W. Brier and D.A. Bradley demonstrated a definite statistical relationship between rainfall and phases of the moon, based on records kept within the U.S. over a 50-year period. Rainfall peaks tend to occur in the week between new moon and first quarter between full moon and last quarter, with drier periods coming after first quarter and last quarter.

J.P. VS. AMERICA: IMPERSONAL (?) OBSERVATIONS - BY JAMES PARKERSON

At the All-American game of baseball I didn't do so well as a boy. I gave it up because when they "chose sides," I was always the last one chosen. But I got into sports anyway: I set bowling pins for 10 years. Besides that (or was it because of it?), I am a little off-target in the All-American game of religion: I believe that the Blade, whereby was born everything man has made, resulted in circumcision, meat eating, and creation as an explanation for the source of raw materials. Also, that scalar formulas resulted in the bilateral, one-extreme-to-the-other lightswitch philosophy of the aggressive evangelists. The books I read help confirm that religion was the proto-science. Volume one of Singer, Holmyard, and Hall's 5-volume HISTORY OF TECHNOLOGY lists 32 technological reference in the bible; everything from the fuller's soap of Malachi 3:2 which was made by burning the soda plant to the possibility that "water of separation" of Numbers 31:23, used along with fire in ore treatment, was mercury usually attributed to the Roman period. The primeval element of the Bible, which God had to get out of the way to make room for the firmament called heaven, was water, and astronomers' primeval element is the lightest element, hydrogen, which makes up two-thirds of water by atom count, hydrogen nuclei forming the protons of all elements. Astronomers get radio signals from hydrogen in space at about 1420 megahertz and from hydroxyl, part of the water molecule, at 1700 megahertz, and speculate that the rings of Saturn are made of ice (frozen water). So, as far as I'm concerned, religion was the proto-science, and miracles are made of language and money and the blade and push-buttons but I consider pantheism superior to anthropomorphism, sun worship superior to wind worship. If we had worshipped a mechanical sun instead of a free wind, then our diet, our sex, and even our minds would be mechanical instead of free, and we would be moral vegetarians to whom octaves of are more important than language and money, the vicarious and unspectroscopic backbone of civilization, and vectorial, "working" formulas made with protractors would overcome scalar, "religious" formulas. July 4, 1976, is coming! Will free America have anything special by then - besides Fords? I would like to see a history of technology replace or parallel our schools' history of politics. (Would it be a violation of child labor laws if children were to study about work as well as about royalty and politicians and armies and wars?) I would like to see pacifists call America's bluff by launching a grand-scale "Peace-Panzer-Corporation," financed by contributions to conventional escrow accounts instead of to bearded "Panthers" in back alleys, to disarm low budget guerrillas who are drafted by their leaders and framed by their terrorists, ending this new series of anti-personnel wars by the country which is currently a country of laws, by the people, for the people. If machines are better than men, why do we need anti-personnel wars? And, of course, I would like to prove that workers can profitably bypass society at sea, conquering even the difficult direction: up, in vehicles using "flying donut" rotors as high as air pressure allows, then switching to some kind of inertial propulsion in outer space: cycle-power like nature's instead of output-power like society's. Savages preceded historians across oceans of water in outrigger canoes, balsa rafts, etc. Can they be far behind across the ocean of space? Erwin S. Strauss says that such inertial propulsion as has been tried (by non-graduate engineers) has failed, the recovery stroke always balancing exactly the power stroke, gross effect neatly cancelling any net effect hoped for, but the model he sketched used arm shortening, and the model I picture uses deflection of weights which recover by centrifugal force, powered by solar/hydrogen-cycle external combustion engines, and when physics-circuits become as clear as electrical circuits, resonance may become the new universal standard. If I could take the sea for such a vehicle, and visit the moon and Mars in it, and die at the age of 100 on one of Jupiter's moons, which would subsequently be converted into a monument for me, the first space savage, that would be a fair trade - for riches and for a wife.

THE OCEAN LAB (NEW HEAT SOURCE): Among the things which distinguish us men from monkeys none is more important than fire. The ancients converted the Sahara from a lush jungle to a barren desert by converting its trees to firewood and charcoal with which to smelt metals (for armor) and glass and porcelain and so forth. Black "savages" of Borneo showed their appreciation for fire by using much of what little metal they smelted to make ornate "fire pistons," lead cylinders with tight-fitting pistons which, when forced quickly inward, compressed the air, heating it enough to light the tinder, this while Europeans struggled with flint and steel to light place fireplaces.

The sea seems to be one big fire extinguisher (useful in atomic wars?), and lush jungles are non-existent there. True, stability of compounds is indicative of the energy released when they were formed, and very stable water was formed from very unstable hydrogen and oxygen, but the hydrogen and oxygen can be separated only by electrolysis, and the electricity needed would probably produce about the same heat as combustion of the hydrogen and oxygen would. The sun's heat evaporates enough water to cause the rainfall which waters the land, and a 2x2' sun still will, under ideal conditions, distill one gallon per day of water.

Blacksmiths increase the heat of fire by blowing it with bellows, and ocean pioneers can decrease heat necessary for distillation by forming a vacuum in their stills with "reverse bellows" or with "sea water barometers" in which the weight of a 33-foot column of water forms the vacuum. Such vacuum is useful only in handling water and other liquids, including bringing calcium sulphate to the hemi-hydrate stage called plaster of Paris without using heat, but a vacuum does not affect solids. They say water exists on the moon only in compound or where physically protected from vacuum of space, so we need heat, as well as vacuum, to melt solids.

What are the chances of getting our heat from big Borneo fire pistons? Underwater pressure would surely compress air, or better gas more than a man's muscles could. Hydrogen ignites at four atmospheres pressure, and Diesel engines are ignited by compression instead of by spark plugs. Enough heat is removed from refrigerant gases by compression to freeze water. Could enough heat be derived from gas compression to melt magnesium, adding fuel to the sea? Best common refrigerant for this would seem to be trichloroethylene which reaches the boiling point of water when compressed to 10 lbs per square inch pressure and might be used to distill water. Compress the trichloroethylene into coiled pipes in water having lower pressure or no pressure atmosphere above it. At 60 lbs pressure, reached at 135-foot depth, would trichloroethylene reach 1200°F, melting point of magnesium?

I suppose compression of refrigerants produces 1 BTU of heat for each 778 foot-pounds of exertion, the same as other mechanics-to-heat conversions (doesn't it, Erwin?), rather than resulting in some hydraulic/refrigerant shortcut, enabling a bicyclist, or ¼-hp input, to put out ten or twenty horsepower. Could the ballast necessary to submerge the "fire piston" with the expanded refrigerant to be applied to some more efficient heat producer? Would "water cooling" ruin the reaction, making insulation necessary, or just cool the mold like a crucible? Could someone with diving lung and air compressor pressurize a fire piston forge with them? -JAMES PARKERSON

OCEAN LIVING: VOL. 2, NO. 1 (November 17, 1969)

An information pool to help floating pioneers harvest sun, wind, wave, and sea on the last, and largest, frontier; if possible, to develop super-pioneers asea to balance tomorrow's super-society (?) ashore...

Skipper: *James Parkerson *First Mate: Kerry Thornley

Crew: *El Ray *John Wilcock *Bob Hayes *Slim Brooks *Erwin S. Strauss *Richard J. King *Skin'n'Bones Jones

~~~

TAKE THE "POW!" OUT OF POWER AND THE "EEK" OF OUT ECONOMICS; GET A SAIL BOAT.





II-12

# COMPACT - EASY TO USE - EASY TO STORE

## **WASH 'N GO™** is perfect for people like you



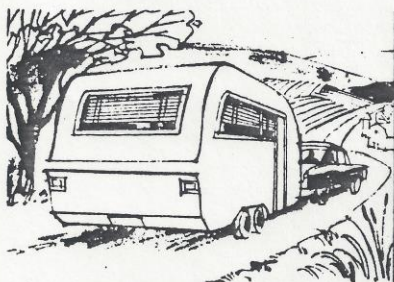
**CAMPERS** — Launder dirty clothes at the campsite . . . pack less clothes for your family!



**HOME & APARTMENT DWELLERS** — Perfect as a second machine for hand washables, small loads. Perfect by itself for apartments. Great for baby's diapers, too.



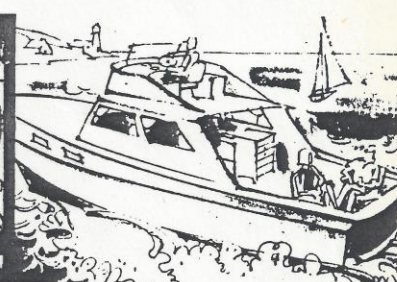
**VACATION COTTAGERS** — Eliminate those trips into town to the laundromat. Get clothes far cleaner . . . far easier . . . than hand washing.



**MOBILE HOME OWNERS** — Compact, easy to store. Any place you stop, you can wash.



**SUMMER HOME OWNERS** — Perfect for any home that's not equipped with a washing machine.



**BOATING ENTHUSIASTS** — Comes apart for easy storage, assembles again in seconds. Stow excess gear in the empty tub.

## NO ELECTRICITY OR BATTERIES NEEDED...

### Here's all you do...

Into Wash 'n Go, put

- 4-5 gallons of cold or hot water
- 3 lbs. of the dirtiest clothes
- 1 cup of laundry detergent

PRICE

**\$11.95**

### Here's how it works...

Agitator operates on the same water-jet principle as automatic washers. On up-stroke of the plunger, water is drawn up into the column, while fins slide past rotating clothes. On the down-stroke, water jets out forcefully to agitate clothes in a continuous circular motion.



# WASH 'N GO

## PORTABLE WASHING MACHINE

TESTED AND APPROVED BY COLGATE LAUNDRY LABORATORIES



## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

“BONITOS” IN FORMATION grace our cover, picture supplied by former FIELD & STREAM editor, L. James Bashline of Bowmansdale, Pennsylvania, who says in a letter to Kerry Thornley, “I know about the quantity of material like this that comes across your desk. My reaction was, most of the time, ‘so what’. I’m sure that yours is frequently the same. Occasionally a new product merits the hoopla that the promoters attach to it. I think that the BONITO does. Totally unlike any of the other ‘fish’, the BONITO is a true family boat that can be played with during the week and raced on the weekend. If you can find it in your heart to throw an editorial mention in the direction of the BONITO, my family would appreciate it...and so would the people at Lincoln Fiberglass.” We appreciate the free cover photo, too, Mr. Bashline.

---

A WASHING MACHINE designed for underprivileged peoples in foreign lands, the Colgate Wash ‘n Go (as it is marketed in America to campers and boaters) is not in mass production – but the last we heard a limited number were still on hand in the company’s New York warehouse, selling for \$11.95. This one-moving-part gadget combines the principle of automatic washer rotation with the energy source of a Chinese hand laundry. We sent for one (and postage is included in the price) and Cara says it is much easier than competitive manual wash facilities – such as washboards and wringers or rocky river banks. It holds four to five gallons, three pounds of clothes, and a cup of detergent. Operation is something like churning butter. Made of extremely lightweight semi-flexible plastic. It ain’t Westinghouse, but think of the electricity you save. –KERRY THORNLEY

(Kerry Thornley’s new address: 857 Monroe Dr. NE #3, Atlanta, GA 30308.)

---

### HOW TO NAVIGATE TODAY – BY M.R. HART

Navigate for \$2.50. Here is a thoroughly modern plain-talk paperback book from Cornell Maritime Press, Inc., which shows that spherical geometry, etc. is no more necessary for navigators than mechanical engineering is for drivers, due largely to the tables in H.O. 249, 214, 211, and 208, two of the tables being reproduced in full, along with other useful drawings.

Nine chapters in 100+ pages show first how to use compass bearings in offshore navigation, then switching from compass bearings to sextant bearings for open sea navigation, with problems, exercises, navigating by the sun, identification of stars, common mistakes, definitions, etc. With this book, a plastic sextant, and access to the H.O. books, everyone aboard can be a navigator.

Advertised on the back cover is another Cornell book I wouldn’t trade for anything: Sam Rabl’s classic BOATBUILDING IN YOUR OWN BACKYARD, which has bonuses such as plans for a Swedish foot-operated band saw, “treenails,” “nails” of locust wood, half and third length lofting, templates for plywood panels, and plans for 11 boats, including 18-foot “Picaroon,” a seaworthy boat of plywood, every frame being a semi-bulkhead, with keel of cast or laminated iron of concrete, and 24-foot ketch, Pelican, not for plywood, but with concrete keel, full headroom under the trunk. –JAMES PARKERSON

---

### VIRGIN ISLAND JOB MARKET BOOMS, SAYS GOVERNOR.

Too many jobs and not enough people to fill them was how V.I. Gov. Melvin H. Evans recently put it in summing up where growing pains due to increasing tourism are hitting the U.S.-owned islands the hardest.

“When you hear about Virgin Islanders who don’t work – who are they talking about?...If you are any kind of person who wants to work, no matter what your skill or education, I can guarantee you two jobs or more,” the governor said in a New York interview with UPI’s Donald E. Mullen.

Citing population figures of 33,000 in 1960 and comparing them with the present 80,000, Evans explained that 33,000 of the present inhabitants are not Virgin Islanders, but members of an “outside labor force” recruited primarily from the British West Indies. These individuals enter as aliens, under a bond that has to be renewed every year, though any children born to them during their stay are legally U.S. citizens.

That rents are extremely high in the Virgin Islands were apparently not mentioned by the governor, but for the ocean living American citizen in search of good job shopping territory – and unburdened with the landlubber’s chronic problem of where to live – the V.I. might be worth some serious investigation.

Salaries are generally said not to be up to prices.

---

Recent months have seen a shift in activististic interest all along political spectrum toward the subject of ECOLOGY. Such a focusing, which can hardly be regarded as anything but healthy, is probably one of the first tangible results of our younger generation’s hopefully contagious rejection of the “plastic world” of the managed society. Some ideas on what to do now that we are all getting interested are offered by Kerry Thornley in the October 1969 issue of WIN Magazine, but by way of a quick-and-thorough introduction to the subject itself nothing can beat the November 4, 1969 issue of LOOK. Learning to live WITH the land and the sea is, as most aqua-libertarians already know, a challenge equal in important to that of avoiding thermonuclear catastrophe. And building new, ecologically sane “seed” cultures on the Earth’s remaining frontiers is a vital element of the work involved. Understanding ecology, the study of the “balance of nature,” should be a constant goal for anyone who wishes to continue to live on this planet. The LOOK issue is a timely gesture. –GIDEON SMITH

---

### THE INDIAN OCCUPATION OF ALCATRAZ ISLAND

International law is, in theory, based on treaties between nations and historical precedents established by custom and usage. In fact, though, it tends more often to be a polite term for the after-the-fact rationalization of whatever, in the field of international relations, one party has managed to get away with doing to another.

New nation projectors and ocean pioneers are therefore more interested in what goes on in the real world when small groups attempt to maintain sovereignty against large powers than they are in the vague theoretics of armchair jurists. For this reason it is a safe bet that most OL readers have been following the occupation of the former Federal prison site, Alcatraz Island, by American Indians with keen interest.

Since 20 November 1969 when the Indians "invaded" Alcatraz until this, writing (just over a month later) the only Federal reaction has been a short-lived, ineffective blockade by the Coast Guard. Claiming the land of "The Rock" by right of discovery" and also on the grounds of an old treaty which allows for Federal land to be turned over to the Indians whenever the Government abandons it, the Indians – who now number in the hundreds – plan to convert the old prison into a university for the re-birth of Indian consciousness among the 600,000 red men whose ancestors this land was stolen.

One thing the Indians have going for them is that any move to dislodge them by force is apt, in this day, to prove politically unpopular. Besides, as the original fourteen invaders of Alcatraz proclaimed in November: "Alcatraz Island is more than suitable for an Indian Reservation as determined by the white man's own standards. It has no fresh running water; it has inadequate sanitation facilities; there are no oil or mineral rights; there are no health care facilities; the soil is rocky and non-productive and the land does not support game; the population has always exceeded the land base; the population has always been held as prisoners and kept dependent on others."

Transporting goods and personnel to the re-possession island from the mainland is the "Indian Navy," an ad hoc fleet of small boats.

The next move in the game is up to Uncle Sam. –KERRY THORNLEY

THE LARGEST VESSEL in history is about to go under construction in Japan by the Ishikawajima-Harima Heavy Industries Co. for Gobtik Tankers Ltd. of London. In the 400,000 deadweight ton class, the new tanker will surpass the six largest vessels currently afloat, also Japanese built, which weigh in at a scrawny 326,000 tons each.

#### NEW YACHT CHARTER GUIDE LISTS 500 BOATS & CRUISES

You can rent a 34-ft. sailboat for a week in the Virgin Islands and go sailing off by yourself. In Greece, you probably have to take along the boat's captain and crew.

These are some of the interesting facts revealed in a new publication, Worldwide Yacht Charter Guide. It was published in late August, and lists more than 500 individuals and companies who charter yachts in every part of the world.

The 24-page guide is published by Jack and Jane Grenard, who also publish magazines for clubs in the Detroit area.

Besides the listings, the guide includes comments on each country or area represented. It tells how to go about chartering, what to avoid, when to go, and who to write to. Yacht cruises as well as outright charters are included, along with price information and sizes of yachts.

Send \$1 for a copy of the 1970-1971 edition to Worldwide Yacht Charter Guide.

THE CORN ISLAND AFFAIR: A new 100,000 watt transmitter will be set up late this year on Little Corn Island in the Caribbean, commercial in nature, owned and staffed by Brazilians, but with CIA broadcasts to thwart Castro's early 1971 attempts to create disturbances in Panama and rid the Canal of U.S. control, jamming American and Brazilian shipping. How do we know? The spirit of a soldier killed by a truck in France in 1943, William Wheton or Whaton of the "Brown Hen" diplomatic outfit of the 148<sup>th</sup> Rainbow Division, contacted Uncle Tom Knietel of ELECTRONICS ILLUSTRATED (November issue) via a Ouija board, a Parker Brothers game consisting of a board printed with alphabet, numbers, yes, no, and goodbye, and a little three-legged platform with pointer which is moved by light pressure from the fingertips of two people who sit opposite each other with the board between. The spirits wouldn't talk to Tom and wife, Judy – only to Judy and friend, Loretta, who had died as a child named Betty Remasot in Europe in 1669. The spirit reported bug life on Mars, and Oswald-Garrison-Thornley fans (Oops! Excuse me, Kerry. It just slipped out.) might be interested to know that three men besides Oswald were involved in the Kennedy assassination: a Carl Haver who has been killed in an auto accident, an Ed Brock who has died of heart trouble, and a third still living whose "FRONT IS EFFONAW," whatever that means, who knew his days were over in Unions, being a red everyone knew, under investigation by Kennedy for sneaking union money out of the country. The spirit said there is no proof, and Johnson stopped stories so he could be top man, and even his wife wants to let him remain hero to "COMMUNTY." Jack Ruby was a fourth conspirator, on the surface only, not knowing the motives. The spirit misspelled words, lapsed into nonsense, and gave Corn Island to Honduras when actually it belongs to Nicaragua, but had the good sense to conclude that, "UNIONS HAVE GOOD THING DON'T ROCK BOAT." If that individualism promoted by the gold \$ is so superior to collective bargaining, how come gamblers, preachers, and derivatives always end on top? Unions buck the tide between the ancient Egyptian satirist who wrote, "I have seen the blacksmith at his work at the mouth of his furnace, his fingers like the skin of a crocodile; he smells worse than the roe of a fish. I have not seen a blacksmith on a commission, a founder who goes on an embassy," and the ancient Hindu religion which divides men into four castes: priests called Bramans, warriors called Ksatriyas, businessmen called Vaisyas, and workers called Sundas, and our ancient religion which insists that God is a magician-king and that work is punishment for sinners, slaves, and dropouts, and that scalar "control-formulas" are more important than vectorial "work formulas." (Not to mention hammer-and-sickle proletarians more noted for hammers that strike firing pins than for hammers that strike nails.) Integration of soul-spirit-mind-body into preacher-businessman-inventor-worker would sabotage Armageddon, etc., wouldn't it? –JAMES PARKERSON (member local 440)

## OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

### MESSAGE DEPARTMENT

Dear J.P.,

The trouble with the idea of using fire pistons for heat is that all they really do is "concentrate" energy: they produce a small quantity of hot material, gaining the energy from the operator's muscles, and relatively "diffuse" source. To smelt metals, and do jobs like that, you need a lot more energy than a man's muscles can provide, and most sources of large amounts of energy (electricity, steam, combustion, etc.) can be converted to heat much more efficiently and quickly by direct means, rather than use of fire pistons.

Sincerely yours,  
Erwin S. Strauss, TTA Enterprises

Okay Erwin, you win; heat pumps doing "tons" of work are practical only in southeastern U.S. where underground heat is available to vaporize the refrigerant during winter, and air conditioning is widely used during summer.

\*\*\*

Dear Mr. Parkerson,

I was pleased to receive your back issues a while ago. I am a resident of Hawaii, and the item about the Badjao villages reminded of the small community located in Kiehi Lagoon, just adjacent to the Honolulu International Airport. It is a shanty town, whose shacks are located on low pilings on the sandbars that were formed with the dredging of the sea plane runways (that are never used anymore) within the reef. It will never cease to amaze me how unhassled their lives must be (except for the noise of the jets, and an occasional newspaper reporter) even though they live in the center of a strategically located, bustling, commercial metropolis. They have no running water, and, I assume, must fish for their livelihood. I was wondering if you could help me in my present situation. I am a sophomore at Occidental, and, as I mentioned before, my home is in Hawaii. I love the sea and am an avid sailor. However, my experience is limited, so far, to small boats, and in particular to my 16 foot sloop rigged wooden tub. I want experience. If there is any way that you know of that I can secure a job crewing next summer I would appreciate it if you could tell me about it. There is no one in Los Angeles that I know who even has a boat, much less who goes on extended cruises (like to Hawaii). Thus, I have written to you, and I hope that you may offer some suggestions that may help me.

Sincerest regards and thanks,  
Tom Aitken

Sorry for being late with this notice, Tom. I haven't access to any boat right now except for my inflatable rubber kayak. Would you still like to cruise Christmas or next summer?

\*\*\*

Dear Ocean Living People:

We have received your OL issues via a friend. It is right on what we need and are interested in. For my objection to the Vietnam war I could choose either exile or jail. I chose "exile" in Sweden where I'm now living with my family. We are opposed to all war, a tragic human social sickness, and we wish to affirm life and peace as much as we can. Therefore, we are building a boat here, a James Wharram designed, 40-ft. catamaran, Polynesian style, of plywood. I am familiar with Charles Greene's Bungay boat kit company as you have talked about in one of your issues. This boat I'm building, called "Narai," appears, from all our study, a very good boat. It won't capsize (except in a hurricane with full sail out), has a number of safety features not found in most boats, will be our family, living boat in which we'll cruise around the world looking for our own paradise.

---

THE OCEAN LAB: An information pool to help floating pioneers harvest sun, wind, wave, and sea on the last and largest frontier; if possible to develop super-pioneers asea to balance tomorrow's super-society (?) ashore.

REVIEW AND PREVIEW: Raise "Navy Beans a la Rancho" in a 3-stage self-watering (by capillary action) plastic "Miracle Sprouter," as advertised in the November ORGANIC GARDENING...8mm microfilming might work if a tilting outfit with special close-up lens were used, but 3-foot close-up and adjustment of the zoom lens on my new Bell & Howell super- movie camera picks up headlines and pictures, but leaves the text just out of focus, barely readable if you remember what it says...Rodale's ENCYCLOPEDIA OF ORGANIC GRADENING confirms value of sterilized urine as fertilizer and describes aerobic and anaerobic digestion of sludge...sea-water barometer/vacuum-still, if the air column were extended underwater in a pipe of some kind would probably need a "bulb" large enough to hold all the water draining from the vacuum chamber below the 33-foot air column, and submersion of this air bulb would take ballast too heavy for a small boat, so that would be impractical. Sorry, I goofed. Another fault is that the retort is rinsed in sea water every cycle, and any salt sticking to the glass returns to any water condensing on it.

Edmund Scientific Company advertises the first low-cost vacuum pump in the Sept. 26 SCIENCE NEWS, a hand-operated pump which produces and maintains 25 inches of vacuum (5/6 vacuum, i.e.), has a full-range vacuum gauge and instant release tab. \$12 postpaid. "Q", another low pressure device which we forgot to compare with the TTA Floating Platform, one which defies gravity, is the parachute, but heavy gusts of wind sometimes collapse parachutes, though inertia of the payload is the only resistance they have to the wind, so I'll stick to my disapproval of large unreefable surfaces such as side decks of small, light, high-riding multi-hulls (Arthur Piver himself having been lost in one) sea-going houseboat walls, etc. in gales. Sorry, Erwin...but you are probably right about the fire piston forge. Heat pumps, like refrigerators, depend on cumulative effect of high speed refrigerant circulation, which takes more than a man's  $\frac{1}{4}$  horsepower. The common way is to use heat to produce power rather than power to produce heat. A small spot of heat is readily available by solar concentration, heat pumps, etc. and the grandiose pyramids and skyscrapers which glorify society while belittling the individual were formed by the small (sharp) edge of the Blade rather than the large (dull) edge in the first place, so if we can figure out how to produce with blades, lathe tools, torches, etc. as well as tool with them, we are all set to bypass society. Fuel shortage is not the trouble in Appalachia but fuel obsolescence, coal and steam power having yielded to petroleum, and, no longer the benefactors of society, they can no longer support themselves, nearly 100,000 high school graduates, thoroughly educated in the exploitation of society if not of nature, leave for prosperous, highly populated areas every year. Our education system rejects animals, savages, and workers in that order emphasizing more lofty things...a recent POPULAR SCEINCE article said flywheels, especially high-speed ones operating in vacuums, are more efficient energy storers than electrical batteries, but they should have one-way strength like wheel spokes rather than being castings, concrete-and-black sand or otherwise, and in the swinging flywheel run by pawl racks, weight supported by swing axis doesn't work, like a man doing push-ups against a wall instead of the floor; most of his weight is still on his feet, and his arms to little work...as for space travel, sea minerals which are attacked either by water or by salt might be perfect in the vacuum of space, and fiber salt might do the work of fiber glass if protected from the moisture of the life support system. "Flying donut" rotor may be impractical as donut-shaped propellers preceded modern "screws" in replacing paddle wheels.

## OCEAN LIVING: VOL. 2, NO. 2 (October 28, 1970)

NATURE-REFUGE AGAINST SOCIAL CATAclySM, ESPECIALLY THAT ADAPTABLE  
TO SAILORS.

An information pool to help floating pioneers harvest sun, wind, wave, and sea on the last, and largest, frontier; if possible, to develop super-pioneers asea to balance tomorrow's super-society (?) ashore...

Skipper: \*James Parkerson \*First Mate: Kerry Thornley

Crew: \*El Ray \*John Wilcock \*Bob Hayes \*Slim Brooks \*Erwin S. Strauss \*Richard J. King \*Skin'n'Bones Jones

~~~

THE SPIRIT OF LAISSEZ-FAIRE

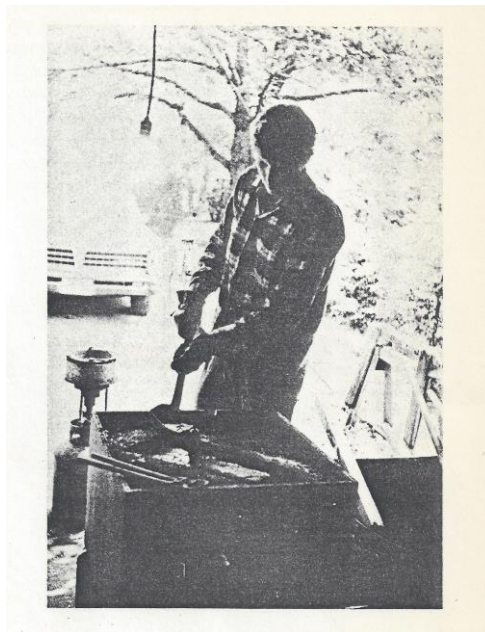
One evening in February, this winter, I leapt ashore after our oil tanker docked in Providence, Rhode Island, ran to the pay phone, called Seafarer yachts in Huntington, Long Island, and ordered a Seafarer 26' sailboat hull. That phone call was the climax of my winter's work and planning, and the beginning of Laissez-Faire.

I continued sailing on Atlantic tankers till April 20, when I took a long awaited 6 week vacation. The hull was delivered to my backyard on the 26th of April. That was the day I had lived for all winter. While standing watches with frozen feet, blasted by the Atlantic's winter gales, through the seemingly endless days of scraping and painting, through 6 months of straining to hold my mind back to the routine of shipboard life, that was the vision which made it possible for me.

I went to work with a will. What a joy it was to be working for myself, to be directly responsible for all aspects of the project. Bulkheads and deck beams were fitted and glassed in. Twenty-five hundred pounds of lead was poured in nine sections for inside ballast. Plywood decks were bolted, glassed, glued, nailed and screwed to the frames. The cabin trunk went on and cabin top beams were fitted. The mast partners of 2 1/4" white oak were bolted in with four 21" bolts. A living larch tree was selected and cut for a mast.

By the time I had completed that much of her, it was time to return to work on Atlantic tankers again, and that's where I am now. I'll work till the middle of August, quit the job, and return home to finish her. I hope to depart for Florida via the intracoastal waterway no later than November. After that, the world.

So far, the costs have added up this way: \$1150 for the bare fiberglass hull, approximately \$700 for options and transportation to my home, and about \$900 for materials so far. I hope to finish her, equip her, provision her, and launch her, for another \$1500.



I'm building and rigging her with single handled sailing and living in mind. The rig will be a 250 square foot Hong Kong junk style mainsail. The mast will stand with no side stays and one forestay, on which various jibs can be set to balance the large mainsail. She will have a wind-vane self-steering setup. I plan to lead all running rigging to cleats near the main hatch, so in rough weather I can sail her from inside the cabin with just my head up through the hatch, which will be protected by a dodger.

The interior shall have one bunk, (with floor space for visitors), a large desk-chart table with a comfortable sea, a head and a galley, and lots of stowage space. All the area forward of the mast will be used for stowage, as will the space beneath the cockpit.

This project has had many advantages and favorable side effects for me. Ever since I quit college last summer and decided to undertake it, I have the experience of living and working for a purpose. This was new to me. I like it very much. I cannot conceive of ever living without a purpose and goals in the future.

Before this, I had read all of Ayn Rand and much general libertarianism with great enthusiasm. But, now that I've got a purposeful direction in my own life, I see all these ideas in a new light: that of living them, not just liking them. That, to me, is an invaluable improvement. I have found an area where I have an extreme degree of affinity with reality. What more can be said?

I decided to name her for the Laissez Faire many months ago, when I decided on a life of the same nature. This is what I see small boat living as making imminently possible. I'll have a snug home capable of easy, economical mobility. A redoubt, a fairly self-sufficient base from which I can view and visit the world of men as briefly or as intimately as I wish. I can partake of all that coastal civilization has to offer, and when it becomes too little, or the price too high, I can hoist my sails and search for the new and better. I will support myself with intermittent work, and by my own writing and painting.

What I feel now is the joy of impending freedom, with no barriers, no limits, with my life in my own hands and my success coming from my own sight and thought and action. -DAVID C. ENGLEHART



MARINE COMPASS

Features internal gimbal system. Will operate in full 360° tilt. Dial in 5° graduations. Illuminated.

No. BL 06 ~~List Pr. \$29.95~~ \$24.95



BINNACLE COMPASS

Fully gimballed with floating hemispheric illuminated dial, always remains level at any angle of pitch or roll.

No. BL 47 ~~List Pr. \$14.95~~ \$11.95

ORDER BY MAIL
AND SAVE!
UP TO
OFF MFG.
20%
SUGGESTED
RETAIL
PRICE



RADIO DIRECTION FINDER

Know your position at all times. Requires no installation, completely portable. Includes: jeweled compass, self-adhesive compass circles, AM radio and station locator, latitude/longitude plotter accurate to 1 sec., mounting bracket, self storing cover, and instruction book. Size: 2" x 5" x 6 1/2".

No. BL 71 ~~List Pr. \$74.95~~ \$69.95

BONUS!

Reg. List Price \$5.45

Act now, and you'll receive a free chrome plated 6-in-1 Utility Tool with every order for \$50.00 or more.

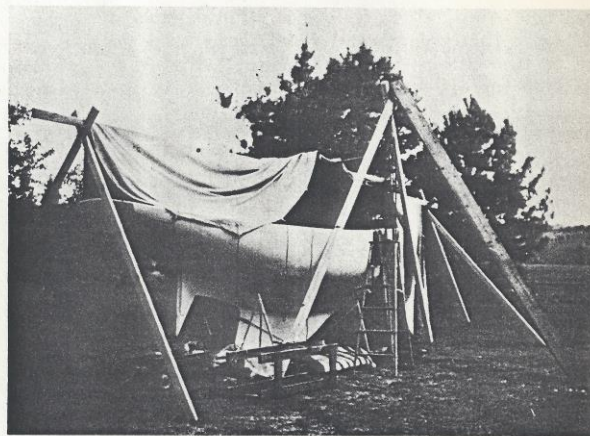


FROM:
JUNE 1970
RUDDER

BOSUN'S LOCKER

P.O. BOX 355 • HICKSVILLE, N.Y. 11802

All Bosun's Locker merchandise carries a one-year manufacturer's guarantee of refund or replacement on any damaged or defective product caused by inferior materials or workmanship.



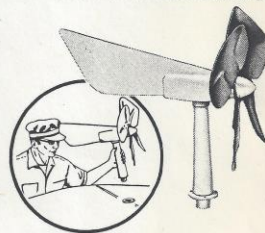
LAISSEZ FAIRE -- IN BODY



DEPTH/FISH FINDER

Accurately determines water depth to over 120 ft. below and around boat, locates fish, underwater wreckage, skindivers. Ultra-sensitive integrated circuit receiver and neon flasher type indicator. Transducer: 1" dia. flanged to facilitate mounting. Completely portable. Size: 2" x 5" x 6 1/2".

No. BL 73 ~~List Pr. \$99.95~~ \$89.95



WIND POWERED TRICKLE CHARGER

Maintain your battery's charge! Puts current into a 12 volt battery in as little as a 5 knot wind. Easy do-it-yourself installation for cruisers, sailboats, outboards. Can be quickly removed for storage below decks while cruising or when boat is unattended. Will not overcharge battery. Modern solid state circuitry. Non-corrosive materials used exclusively.

No. BL 64 ~~List Pr. \$99.95~~ \$89.95

OCEAN FREEDOM NOTES
(RE-LAUNCH)
1984-1990

OCEAN FREEDOM NOTES, ISSUE NUMBER 1 [FEBRUARY 1984]

INTRODUCTION

Since the demise of OCEAN FREEDOM/OCEAN LIVING, there seems to be no publication covering the self liberation strategy of ocean freedom (also known as sea mobility). I've considered publishing such a newsletter myself, but that doesn't appear feasible. So instead, I'm going to include that kind of material here in LF under this OCEAN FREEDOM NOTES logo. OFN will run to 1 or 2 pages only in any one issue of LF & may not appear in every issue. It will consist mostly of short items, reviews, & access tips to sources of information & equipment relevant to self liberation using ocean opportunities.

THE COMPLETE LIVE-ABOARD BOOK

CoEVOLUTION QRTLY recommends this book (CQ37, p. 113) & says it thoroughly replaces "Living Aboard" which was reviewed in NEXT WHOLE EARTH CATALOG. At \$39.95, this is an expensive book, but anyone really considering buying a boat to live-aboard couldn't [couldn't] afford not to buy the best advice available before he invests. In that light, this wd [would] be money well spent.

THE COMPLETE LIVE-ABOARD BOOK, by Katy Burke, N.A. 384 pages, 1982, \$39.95 postpaid, from Seven Seas Press, 524 Thames St, Newport, RI 02840.

BOOKS ABOUT BOATS

Here are 2 publishers of books about boats, ocean voyages, living-aboard, etc. Write to them for catalogs:

1. Seven Seas Press, 524 Thames St., Newport, RI 02840.
2. International Marine Publishing Co, 21 Elm St, Camden, ME 04843.

BOAT FOR SALE

I came here to Calif. from Lake Erie on an 18 foot sloop, then sold it & built a 25 foot sailboat. But I've never used it & now probably never will. I would like to find someone to buy it or trade me something for it. I have a description sheet I can send to anyone who writes for it. The boat is deep-sea, live-aboard, easily-handled, unsinkable, shallow keels, safe. Paul Doerr, 225 E. Utah, Fairfield, CA 94533.

UNINHABITED & DESERTED ISLANDS (book)

This is the only book in print (as far as we know) devoted exclusively to uninhabited islands, over 180 of them, in the South Atlantic, Pacific, Indian, & Antarctic Oceans. Contains hard-to-find information collected from dozens of sources. Detailed descriptions of each island cover physical conditions, political status, history, climate, plant & animal life, etc. Includes 41 maps, list of references, & index of uninhabited islands.

UNINHABITED & DESERTED ISLANDS, 5 1/2 x 8 1/2, 116 pages, only \$9.95 postpaid. (See address below.)

WATER POWER – Summer 1969 issue of INNOVATOR about ocean freedom. I have reprinted this additional issue of INNOVATOR, & I offer it for \$1.00 postpaid.

Contents:

1. Go like water, on the water (explains the strategy: "inexpensive mobility made possible by sail, along with no-mans-land status of ocean, gives aqua-libertarian freedom to live in peace as pleases him.")
2. Your boat: passport to freedom (types of boats, recommends trimaran, learning to sail, list of books)
3. Houseboats: the easy way out
4. Wave motion provides barge motive power
5. An ocean lab for ocean living
6. Libertarian technology of ecology
7. Men of the future (about Richard King, and Roy Bates, Prince of Sealand)
8. Gypsies of the Sulu Sea
9. Honey: The ideal survival food

INNOVATOR, Summer 69 (order #SU69), 8 pages, 8 1/2 x 11, only \$1.00 postpaid. Also still available: INNOVATOR, Autumn 69 (order #A69), 10 pages, 8 1/2 x 11, only \$1.25 postpaid.

To get these INNOVATORS, or the book U&DI send payment in cash, check, or money order, US funds only, overseas postage extra, to Jim Stumm, Box 29, Hiler Branch, Buffalo, NY 14223.

MAPS OF ISLANDS

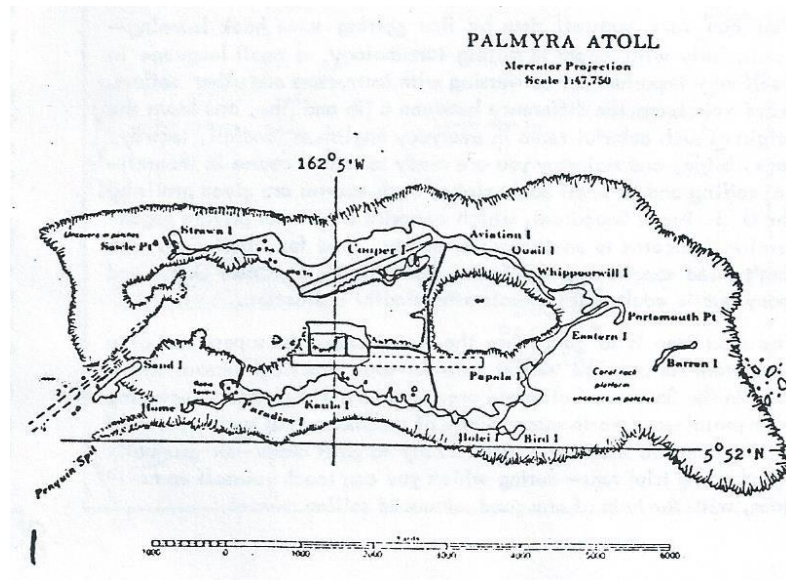
There are 2 US Govt agencies that sell very fine maps of many ocean islands. They are: Defense Mapping Agency, and National Ocean Survey. For more information write to:

1. DMA, Office of Distribution Services, Washington, DC 20315.
2. US Dept of Commerce, NOAA/NOS – C44, Riverdale, MD 20737.

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

The latest price I have for a DMA map is \$8.30 each. They are various sizes up to about 3 feet by 4 feet for one sheet. Very detailed.

As an example of what these maps look like, here, reduced quite a bit, is a map of Palmyra taken from a NOS map. Palmyra is an uninhabited tropical atoll that lies about 1000 miles south of Hawaii near the equator. The book UNINHABITED & DESERTED ISLANDS has detailed information about Palmyra.



(Editor's Note: Here are parts 1 & 2 of a 6-part series by Kerry Thornley that was published in INNOVATOR from July to Dec 1966. In upcoming issues of LF/OFN I'll reprint the remaining parts 3 to 6. The idea of the PERMANENT FLOATING VOLUNTARY SOCIETY was explained by Rayo in these words: "As more libertarians take to the water, some will doubtless anchor & migrate more or less together as a semi-permanent water-borne 'community' saving time & money thru exchange of services – 'internal' free trade not subject to the scrutiny of any State." (from VONU: THE SEARCH FOR PERSONAL FREEDOM, page 50. Thornley's series is somewhat outdated, especially the prices! But it's worth a 2nd look & makes a good starting point for further research.)

THE PERMANENT FLOATING VOLUNTARY SOCIETY – I

"What's the use of being a shipmaster if you can't tell people to go Hell?" – Old Captain's Proverb

The greater portion of this planet's surface is out of the effective control of any State, and yet libertarians complain that for the man who would be free there is "no place to go." This article is the first of a series dedicated to an exploration of the "ocean interstice" as a means to personal liberty and economic freedom.

SMALL BOATS

For as low as the price of a late-model car an individual can purchase a sea-worthy vessel large enough for a small family. This writer is acquainted with a couple who bought a used 26-foot yacht for somewhere around \$500 and lived aboard, with their small daughter, sailing the Pacific for a year. Since these folks were not averse to a steady diet of fresh sea food, expenses were quite low – for, as the man of the family pointed out, "There was no place to spent money out there." (And on a previous voyage to the Virgin Islands they had stocked up on rum at \$1.25 a gallon.)

For the less adventurous a slightly larger investment will fill the galley with dry-land staples. And for those who want to get grim about investing money on a boat, it is no problem to spend over \$30,000 for a fancy yacht. But suitable used – or brand new – boats can be had for much less.

You can save yourself time by first getting some book learning – particularly with regard to sailing terminology, a small language in itself very important for conversing with instructors and other sailors. After you learn the difference between a jib and jibe, and learn the origin of such colorful terms in everyday English as landfall, leeway, tack, bilge, and mainstay you are ready to take a course in theoretical sailing and/or small boat safety. Such courses are given gratis by the U.S. Power Squadrons, which comprise a national private organization dedicated to on-the-water safety. And for libertarians who don't mind sanctioning the State, both the U.S. Coast Guard and many public adult night schools offer similar instruction.

The next step is to go out on the water under the supervision of a competent sailor. The market rate for such practical lessons at this time in Southern California is around \$10 an hour – including boat rental – and worth every penny of it. Six hours of such supervised sailing ought to make you about ready to go it alone – for gradually lengthening trial runs – during which you can teach yourself to navigate, with the help of any good advanced sailing manual.

By this time, if you have not been doing so before, you will probably be keeping an eye out for that special boat that fits YOU. A sailing vessel with a motor of some kind is probably the best bet for exploring the ocean “interstice” on a small scale – combining fuel economy with flexibility. There are boats made of steel, fiberglass, and wood. Some are built for speed and others for cruising. You will be learning more about the choice of a boat for yourself in the process of becoming sea-worthy; meanwhile, the steps outlined above will help you “get your rudder wet.”

KERRY THORNLEY

THE PERMANENT FLOATING VOLUNTARY SOCIETY – II

“I glance at the chronometer...I stare at the thin red lines...if only the shore world were regulated by a force as logical—as honest—as the Law of Storms.” STERLING HAYDEN (1)

LARGE BOATS

A former political activist who decided to eliminate the middle-man in his crusade for individual freedom, Bill Beer illustrates in the flesh the Permanent Floating Voluntary Society concept. The Beers-Bill, his wife, Sue, and their 3 ½ year-old daughter, Barrie—perform the combination host-crew-guide services of the new family occupation, charter sailing, aboard the TRUE LOVE (which starred as a major prop in the movie, “High Society”) about half their days on the Caribbean. When they are not chartering or sailing on a busman’s holiday, their boat is tied to the dock in Charlotte Amalie of the U.S. Virgin Islands. Here the Beers make repairs and mingle with the 20 or so other couples in the Virgin Island charter fleet.

The Beers acquired the capital necessary for setting up their new business by selling all their property “down to the TV set.” Then they traveled to Connecticut where they purchased the TRUE LOVE.

At this time Sue Beer had no sailing experience and Bill had never owned a boat. They learned seamanship the hard way – under the tutorage of a dense fog, a churning inlet, a sandbar, 200 miles of inlet waterway, and a storm in the Atlantic, in that order, on the trip down to the Caribbean – which prepared them for successful sail navigation of the reef-strewn, poorly-charted Bahamas archipelago when their motor blew up near the end of the voyage.

But now Bill can say, “We have a freedom and an independence matched by few and the solid security of near self-sufficiency. We could ask no more.” (2)

Charter sailing tourists in colorful parts of the world, as the Beers are doing, is a good way to make money while living at sea, but it is not the only way in which a large boat can serve as a tool of production. Simple freedom from police harassment for group activities – such as wild parties, clandestine political meetings, illegal medical operations – is a valuable condition which a boat captain can provide for a fee. In addition, he can run cargoes to out-of-the-way places unserved by major shippers, provide transportation to escaping political refugees, and undertake speculative anti-State ventures – such as the smuggling of American cigarettes into Spain, where high tariffs make such operations, however dangerous, extremely profitable.

Smuggling opportunities in a world of antilibertarian trade policies, in fact, are legion – one can take diamonds out of Africa and South America, run arms to rebels in Cuba, land used auto and refrigerator parts in Mexico, bring gold into certain near-totalitarian countries where ownership of some is unlawful...all for life, liberty, and property.

Large boats, in short, offer a way to liberty for those interested in economic as well as personal freedom but who yet do not possess capital necessary for such Permanent Floating Voluntary ventures as shipping lines or man-made islands, to be discussed in the future articles of this series. KERRY THORNLEY

(1) WANDERER by Sterling Hayden (Knopf, 1963)

(2) “A New Life at Sea For Family” by Bill Beer in the Santa Monica EVENING OUTLOOK (WEST Magazine Section) of 16 July, 1966.

OCEAN FREEDOM NOTES, ISSUE NUMBER 2 [May 1984]

SSCA COMMODORES' BULLETIN

The SEVEN SEAS CRUISING ASSOCIATION BULLETIN is a monthly newsletter written by & for people who live aboard small, seagoing sailboats. SSCA has been in existence in 1952. To become a full member (commodore) your only home must be a seagoing sailboat, you must have lived aboard it for at least a year, & you must be recommended by 2 SSCA members. But anyone may subscribe to the BULLETIN. The SSCA BULLETIN consists mostly of letters from "commodores" in which they describe their cruising experiences, often giving very definite info about the passages, ports of call, harbor conditions & facilities, reefs & currents, customs officials, where to find bargains & reliable services, etc. This is hands-on, no BS, hard info.

SSCA proves that this seagoing life is do-able, because these folks have been doing it – for 32 years. Almost every letter mentions the size (length) of the writer's boat & I notice that most are over 35 feet, though a few are smaller, down to 25 feet. And I get the impression that the vast majority of SSCA members sail as man/woman couples, though there are a few singles. So we can learn from the experts, those who are doing it, what is the best way to go in this lifestyle, i.e. as a couple, in a boat 35 feet or larger.

The BULLETIN runs about 30 pages per monthly issue, 5 ½ x 8 ½, \$18 per year. Back issues & index are available. Write: SSCA, POB 2190, Covington, LA 70434. Recommended.

LETTER FROM DAVID H.

The best national boating magazine I read is CRUISING WORLD (524 Thames St, Newport, RI 02840). I feel it has the most personal orientation. Also, they have a resource list of people to contact if you want an opinion about a particular boat, people who have owned it or do own it, & are willing to share opinions about it.

And the best regional – most person-to-person orientation – periodical I know of is LATITUDE-38, out of Sausalito, Calif. I say regional as it's mostly for Bay Area folks, but many people in different states, & world cruisers, subscribe. It would still be a good resource for someone living in another part of the country.

CoEVOLUTION QUARTERLY, OCEANS ISSUE (#23, Fall 79)

This issue contains a 100 page section devoted to oceans & boats, by the WHOLE EARTH CATALOG people, with their usual flair and thoroughness. It includes "The Whole Sea Catalog" (access to books & tools), "Ocean Power: A Salt Solution" (5 ways to get energy from oceans), & "Ocean Arks" by John Todd (of New Alchemy Institute), which describes Todd's vision of a greenhouse on a sailboat, almost a blueprint for a vessel in which one could live a self-reliant life on the ocean. Besides this oceans section, CQ 23 also contains all the usual CQ features, including soft technology, land use, nomadics, etc. to fill up 144 pages.

You can order CQ 23 for \$3.50 from Box 428, Sausalito, CA 94966.

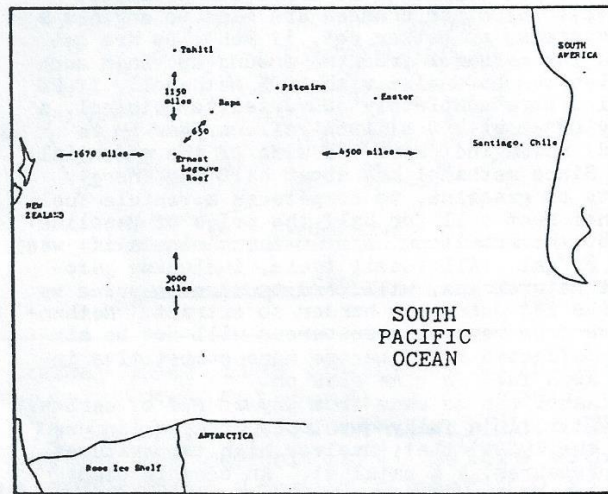
FREE COMMUNITY ON ICE

Proposal Summary: Create new "land" for a libertarian new country by towing a tabular iceberg from Antarctica & grounding it on an unclaimed reef in an area about 1200 miles south of Tahiti. The iceberg would provide living space & fresh water. An OTEC would provide electricity using the iceberg for the cold side of the process. This would power a methanol synthesis plant. Fresh water, methanol, & other industrial chemicals would be exported in oil tankers to distant markets. Additional icebergs would be brought from Antarctica to replace bergs that melt & are consumed.

New country projects face a political/economic dilemma. Such new countries are usually thought of as trading centers, & for economic viability as a trading center such a community must be situated near a populated area. But this puts it right under the eye of a powerful govt that won't let it remain free for long, if it can even get established. To remain free, a minimum requirement is that a new country must be located far away from any area of immediate interest to existing govts, but that means it won't be viable as a trading center. So how then can it be made economically viable? I suggest: the community could make & export bulk commodities for which a large & growing market exists. Once this economic foundation is laid, it might evolve, years later, into a trading center.

A place where this might be done is on one of the submerged Pacific Ocean reefs that lie over 1000 miles south of Tahiti, in the 30's of south latitude. This is in the same subtropical latitude (though not at all near) northern New Zealand & New South Wales, Australia, so the climate would be similar to those places. The many suitable reefs in this region include Wachusett Reef, Ernest Legouve Reef, Maria Theresa Reef, & others not named on many maps. None of these reefs are claimed by any recognized govt.

A look at distances will show how isolated this region is: Ernest Legouve Reef (to take one example) is about 650 miles SW of the nearest inhabited island which is Rapa in the French-owned Austral Islands. This reef is about 1150 miles S of Tahiti. New Zealand lies about 1670 miles to the west of it. And due east there is nothing but water for over 4500 miles until you reach S. America. The ocean to the S is also completely empty (except for icebergs) for over 3000 miles until you get to Antarctica.



[Visual representation of distances described above]

These distances mean that a free community here would be outside the immediate area of interest of any govt & would have as much safety from govt coercion as distance can provide anywhere on Earth. Secondly, these huge distances indicate that there is a vast empty region in the SE Pacific that would provide almost unlimited room for expansion for a successful new country if a means of living on, under, or over the ocean could be developed.

To provide for living space this reef could be built up using conventional landfill or oil platform technology, but that would provide only a very small amount of expensive space. A cheaper way to get a large amount of acreage is to tow a tabular iceberg from the Antarctic Ocean & run it around on the reef to anchor it in place. Antarctic icebergs are rectangular blocks, flat on top, over 1000 feet thick, with about 200 feet of that standing about the water line. The largest iceberg ever seen was about 12,000 square miles in area, so the size limitation lies not in what's available, but rather in the ability to tow such massive bodies.

The iceberg would provide fresh water for the use of residents & also for export. (Icebergs are fresh water ice, not frozen seawater.) Of course, the ice would melt in the warm lower latitude, but perhaps an insulating covering could be applied to it to retard melting. In any case, it would probably take a large berg several years to melt. And as one berg melts, another would be towed up from the Antarctic to replace it, & then another to replace that one, & so on. As the ice melts, the water would be pumped into former oil tankers to be shipped to populated regions where water is scarce, such as to Australia, & southern California. That would be one export.

Energy for such a remote ocean site could be provided by harnessing wind or waves, but the most promising source would be to harness the temperature difference of hot & cold water in an OTEC (ocean thermal energy conversion system). Warm water could be taken from the surface of the ocean, which acts like a huge natural solar collector. The cold side of the system would be the iceberg. The energy generated by this OTEC could be used to synthesize methanol, which would be another primary export.

Over one billion gallons per year of methanol (also known as wood alcohol) is now made in the US from natural gas in synthesis plants along the Gulf coast. It is used as a solvent & as a feedstock in other chemical processes. Methanol can be used for fuel, both for stationary plants & for vehicles. Blended up to 15% with gasoline, it can be burned in existing internal combustion engines (there may be some corrosion problems, however). If minor changes are made to engines & fuel systems, or better yet, if vehicles are designed for methanol from the ground up, then such vehicles can be fueled with 100% methanol. If US vehicles were completely converted to methanol, a supply of about 200 billion gallons/year would be needed, which indicates the size of the potential market. Since methanol has about half the energy density of gasoline, to compete as a vehicle fuel, methanol must sell for half the price of gasoline. In 1980 the retail price for methanol in Calif. was about \$1/gal. All fossil fuels, including gasoline & natural gas, will tend to rise in price as supplies get scarcer & harder to extract. Methanol made from renewable resources will not be similarly affected & should become more competitive in price as a fuel as time goes on.

Methanol can be made from any source of carbon, plus water, in a fully developed process (in use since the 1920s) that involves high temperatures, high pressures, & a catalyst. An oceanic plant can obtain carbon by stripping dissolved carbon dioxide from sea water, which is a highly efficient process. Methanol is a liquid at room temperature, with a high energy density, so it could easily be transported long distances to market in existing oil tankers. The hazards of pollution from spill should be less with methanol than with oil because methanol is completely soluble in water.

High technology machinery, such as an OTEC or a methanol synthesis plant, for any remote site with access to the ocean could be assembled on barges in low cost Asian shipyards, perhaps in Japan, Korea, or China, & towed to its final destination. Depending on the market, other products could be produced in oceanic chemical plants, rather than, or in addition to, methanol. One such possibility is ammonia made from hydrogen (from water) & nitrogen (from air). Ammonia is also a liquid that can be transported in tankers & it's used extensively as a fertilizer. Ammonia now is made from fossil fuels & consequently has been rising rapidly in price. Other possible products

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

include any industrial chemicals that can be extracted or synthesized from seawater & the atmosphere & delivered to distant markets at competitive prices.

Thus, a chemical industry appears to offer a sound economic base for a libertarian new country at a remote ocean site which would probably not be viable in its early years as a trading center.

References:

1. "An Offshore Energy Industry" by Jim Stumm, THE CONNECTION 87, p. 13.
2. "Icebergs" by Jim Stumm, THE CONNECTION 109, p. 107.
3. LAST FRONTIERS ON EARTH by Jon Fisher, chapter 3, p. 29.
4. "The Case for Floating Islands" by Gary Hudson, cassette tape of speech at FREELAND I conference.

MACHIAS SEAL ISLAND

This is an island of "undetermined sovereignty" off the coast of Maine, claimed by both Canada & US. A letter to the chamber of commerce in a nearby town in Maine asking for info about Machias Seal Island resulted in this reply:

"I have been taking people to Machias Seal Island since 1940. I guess that is why your letter was sent to me. Machias Seal Island is not owned by a private party. There is a Canadian lighthouse that is manned, plus a Canadian warden from June-Sept. The island is 1850 feet long & 937 feet wide at the widest part. Both US & Canada claim it, US by the Treaty of Paris & the Treaty of Ghent. Canadian merchants built a light on it in 1832. Canadian Govt later took over the light.

"In 1865 Canada tried to claim the area & started armed conflict by boarding the 'Essex,' captained by Barna Beal. The Canadians were thrown overboard & thrown back aboard their vessel completely beaten & driven from the area. Barna ruled the area for many years. He was a great friend of the Canadian light keepers.

"Machias Seal Island is 10 miles from US mainland, & 11 miles from a Canadian island. It is under the US coast, you travel south, & west of the Canadian island. The island was named Machias because it is off Machias Bay & near the town of Machias Maine. I take people out there & do not go thru customs." Barna Norton, Jonesport, ME 04649

THE PERMANENT FLOATING VOLUNTARY SOCIETY – III

"The term 'cheap flags' refers to the three States, Panama, Liberia, and Honduras, which lend their flag indiscriminately to all ships provided the owners pay once a registration fee and a very low yearly registration tax. Apart from this the shipowners sailing under the 'cheap flag' are not subject to taxation...Furthermore, this freedom from taxes is guaranteed by the law at the same low level in Liberia for 20 and in Honduras for 30 years. It is most interesting that thus three small and underdeveloped States achieved foremost positions in the world shipping market in spite of the various obstructionist efforts by others, States and competitors..." –PEACE PLANS (1)

SHIPS AND SHIPPING

During the last century no voice was louder in calling for government intervention than that of the American shipping industry. Not only did the shippers want subsidies (in order to better compete with the subsidized lines of England), but they were quite willing to tolerate – and sometimes even encourage – trade tariffs as a means of enticing Congress to grant them privileged status. They got their intervention. Now American shipping is on an overall decline – and shippers are demanding increased subsidies (in order to better compete with the nonsubsidized "cheap flag" lines)! If it has seriously occurred to any American shipowner that the industry's trouble is due to the "expensive flag" of tariffs, make-work legal regulations and, yes, subsidies (for other people) and the resulting taxation – he is probably no long owner of an American (registration-wise) ship. For the most cheerful thing an American shipper can hope for besides a handout, these days, is a good and bloody full-scale war.

Keeping this in mind along with the corollary that anyone in close sympathy with the policies of American shippers cannot be expected to have much understanding of economics, the interested libertarian will find THE PRINCIPLES OF OCEAN TRANSPORTATION by James Vernon Metcalfe (a Professor of Foreign Trade at Seattle University) a very fine book. Chief among its virtues is its comprehensive yet relatively concise approach to a field that is usually written about in either a highly specialized manner or in a style so popular as to be superficial. THE PRINCIPLES OF OCEAN TRANSPORTATION is the introductory book for the libertarian interested in taking advantage of the Freedom of the High Seas on a heavy-industry level. It provides orientation in all aspects of operating merchant vessels.

The chapter titles are: Ship Characteristics; Ship and Cargo Measurements; Before the Vessel Arrives; Entering a Vessel From a Foreign Port; Terminal Operation; Vessel in Port; Cargo Handling; Cargo Procurement; Cargo Stowage; Vessel Stability; Cargo Documentation; Ocean Freight Rates; Vessel at Sea; Vessel Chartering; Foreign Freight Forwarders; Marine Insurance; Admiralty and Maritime Law; Labor Relations; Ocean Shipping via Canals; World Fleets and Ports; Domestic Commerce of the United States; The United States Merchant Marine; and Reports from the Lookouts. This book can be purchased from the publishers, Simmons-Boardman Books (30 Church St., New York 10007, 1959), for \$5.50.

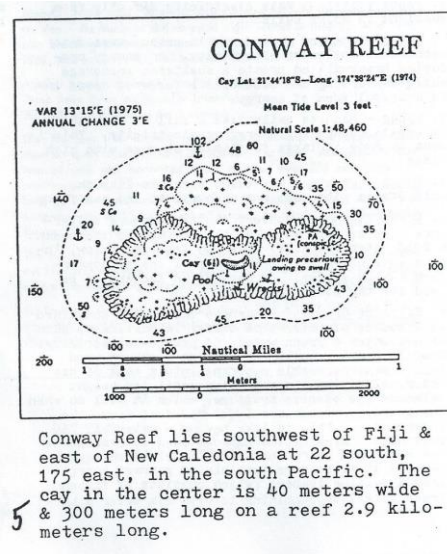
The prime consideration with regard to merchant shipping is capital. Unless you have or can raise several hundred thousand dollars, starting a shipping line is out of the question. (2) Possibly a number of libertarian businessmen will form a company for precisely this reason – for no industry is less physically subject to State harassment, and therefore any better prospect for long-term investment, than ocean transportation.

Another possibility is for associations of libertarians to form, each for the purpose of buying one ship, and for these associations to cooperate under a single company trade mark. Each association could represent a particular faction within the movement. Thus one might envision a ship with a limited constitutional government all of its own sailing beside one without any government at all. And perhaps there would be an aircraft carrier called the HENRY GEORGE upon which the captain collected "deck rents," while the sailors aboard the schooner GREEN REVOLUTION experimented with farming at sea. The possibilities for cooperation and diversity are at least intriguing. And the Kerista people will be pleased to know that ships under at least two present-day flags have both male and female crew members.

Finally, should the day ever come that Agoric Shipping Lines (or whatever) would decide to be done altogether with the political powers of the world, many existing merchant ships (including all those built with U.S. subsidy money) are specially made for quick conversion to fighting status, so it would not be the usual matter of armed government goons saying to unarmed businessmen, "Come let us reason together." KERRY THORNLEY

(1) PEACE PLANS (J. M. Zube, Wilshire St., Berrima, N. S. W., Australia), issue no. 7, page 25. This quote translated by Zube from a review in HEFT (a German publication) by Solneman. It appears in full as part of a two-and-a-half page proposal in PEACE PLANS entitled "Freedom of the High Seas to be Extended to Continents," an excellent article in its own right.

(2) Now and again one hears of "war surplus liberty ships" or something of that order for sale at less than a hundred-thousand dollars. By the time such vessels were put into sailing order, I have it on good authority, a fantastic monetary outlay would be needed. I have not priced ships extensively but do know of one medium-sized tanker in bad condition that was valued at \$400,000. Of new ships, those made in Japan are said to be among the most reasonable and those built in the United State are exorbitant at no appreciable increase in quality.



OCEAN FREEDOM NOTES, ISSUE NUMBER 3 [October 1984]

EDUCATION AT SEA

Sharon Lisa Prytherch, who is 14 years old, has never been to school in her life. Nevertheless, she has just passed the 1st part of the London University Entrance Examination, according to a letter in SSCA BULLETIN, May 84. Sharon lives with her parents aboard the ketch "Dalisha," now (early 84) wintering in Cartagena, Spain. Her parents taught her the basics, then she received further lessons via correspondence courses.

Meanwhile, across the world, Paul & Hillary Stoeken are studying 1st & 3rd grade lessons from Calvert School, Home Instruction Dept., Tuscany Rd, Baltimore, MD 21210, while sailing with their parents on the ketch "Independence," recently cruising in French Polynesia.

OCEAN ENERGY SOURCES

1. Wind – Use a wind energy conversion system (windmill) to make electricity from wind, or for water pumping or other direct use of mechanical motion, or to compress air or pressurize hydraulic fluid to transmit mechanical motion some distance away.

2. Solar, Thermal – Use heat from the sun for water heating, space heating, to desalinate seawater, etc.

3. Photo Voltaic – Make electricity directly from sunlight in solar cells.

4. Waves – Convert the energy in ocean waves into mechanical motion or electricity. An energy producing breakwall could create a sheltered anchorage while converting the destructive force of waves into a useful form of energy.

5. Tides – Harness daily rise & fall of the tides to create mechanical energy or electricity. This is usually done in large facilities at bays with high tides.

6. Ocean Currents – Tap ocean currents like the Gulf Stream with turbines anchored to the sea floor.

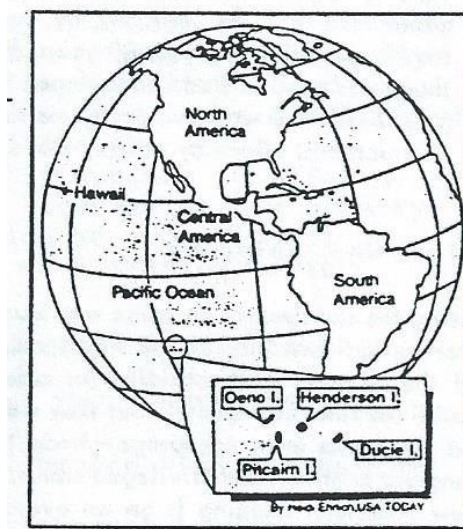
7. Ocean Thermal – Convert the temperature difference between warm water on the surface of the ocean & cold water (usually) drawn up from far below, into electricity in an ocean thermal energy conversion (OTEC) system. Or perhaps an iceberg could be used for the cold side.

8. Salinity Gradient – Harness the energy contained in 2 bodies of water that differ in saltiness, such as sea water & fresh water, to produce electricity. Osmotic pressure will cause fresh water to pass thru a semi-permeable membrane into a tank of sea water, elevating the sea water until its height balances the osmotic pressure, which it will do when the sea water reaches a level 750 feet about the fresh water. This is like having a waterfall 750 feet high. Many of the methods used to desalinate sea water can be run backwards to yield energy. Perhaps it would be more feasible to extract energy from a melting iceberg (which consists of frozen fresh water) by combining it with sea water and harnessing the salinity gradient rather than the thermal gradient.

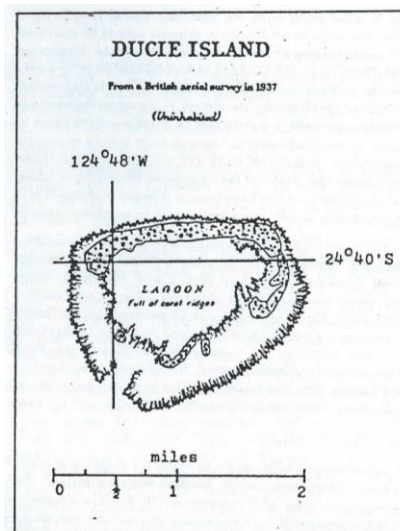
Reference: "Ocean Power: A Salt Solution" by Gerry Wick, COEVOLUTION QUARTERLY 23, Fall 1979.

THE LONELIEST ATOLL

If you travel toward the southeast across the Pacific, you'll encounter dozens, if not 100s, of tiny coral atolls. Eventually, you must come to the last one, & this is it, the last, remotest atoll, Ducie. How remote is it? You can travel S, N, or E from Ducie & find nothing but empty ocean for 1000s of miles. To the S, there is only Antarctica. Due N, you'd pass to the E of the Tuamotus & Marquesas, cross the equator, & not hit land until you reach Calif. Heading E., you'd pass N of Easter Island & find no landfall until you reach South America.



Only to the west are there nearby islands, & they're nothing much. Ducie is one of the 4 islands of the Pitcairn group, all uninhabited except Pitcairn itself. And the population of Pitcairn is only about 60 & falling. Ducie lies about 300 miles east of Pitcairn. The only vessels Pitcairners have are open longboats, not suitable for long ocean passages. Consequently, they never visit Ducie. In fact, Ducie is seldom visited by anyone, & it has never been populated. A couple ship-wrecked sailors have lived there for brief periods, but that's about it. If you're looking for a really remote hideout, Ducie would be on your short list of good prospects.



THE PERMANENT FLOATING VOLUNTARY SOCIETY – IV

“In Japan a restaurant has been planned under the ocean where patrons can watch the fish and vice-versa. And perhaps it won’t be long before some enterprising American builds a resort hotel nestled twelve fathoms down on the pure white sand of a reef valley and hemmed in on all sides by tumbling gardens of coral and the constantly changing, multicolored life of the sea.” – THE BOUNTIFUL SEA (1)

MARINE CITIES

Many previous issues of INNOVATOR have contained reports on the “pirate” industries of the North Sea – commercial endeavors which do not pay “protection” money to the governments of Europe, since they are located outside the territorial boundaries of some, as defined by International Law. As the food, mineral, and living space potential of the sea come more under the control of technology, enterprises of this nature increase in number on continental shelf areas all over the world.

Farming the sea, for both fish and edible sea-weed, is emerging from the experimental stage. Some twenty percent of Japan’s coal is mined from beneath the ocean floor, and countless other pilot mining projects – for every mineral imaginable – are under way around the globe. The bottom of the sea is also already a widely recognized storage place. One U.S. city stores its water supply beneath its harbor and fuel has been stored successfully by the U.S. Navy in the Gulf of Mexico. The prospect of sea cities, on and under the surface, is now taken for granted by informed prognosticators – and the prospect is immediate.

There are two ways libertarians can take advantage of these developments:

(1) FOCUS EDUCATIONAL EFFORTS on the men and women who are involved in these projects. Meet and become acquainted with ocean frontiersmen. (Think how handy such friends might be in an economic or political crisis!) Ask them many questions. Find out what their professional problems are and suggest solutions that are in accord with their libertarian principles. Inform them of their rights above the law. Tell them how to foil the statist mentality and defeat the expansionist efforts of the national bureaucracies. (These are things you can do no matter where you live. The marine biology professor at a Midwest College is as much a part of what is virtually a Second Industrial Revolution as the hypothetical “enterprising American” who builds a resort twelve fathoms down. And if you live in an Arizona ghost town you can still write letters, or even newspaper columns.) Demonstrate to the marine pioneer that his prime advantage is the long tradition of Freedom of the High Seas, and that it will be personally profitable to him if he does all that is within his power to maintain it.

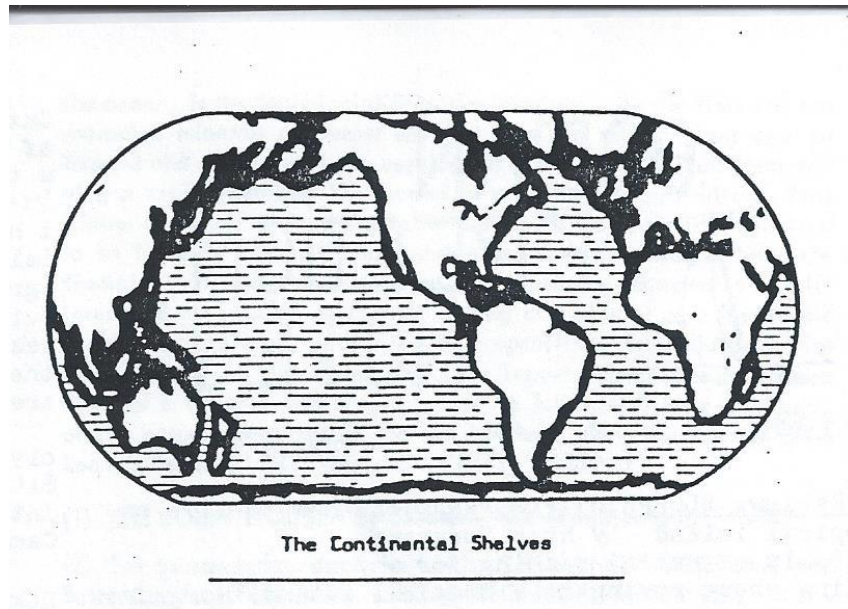
(2) CONCENTRATE INVESTMENT OF RESOURCES on maritime metropolis projects, particularly on man-made floating islands and other highly mobile capital, since this can best be defended against future attempts at control or confiscation by the world powers. (Another possibility that should not be entirely ignored though, is the “bubble on the bottom” concept, especially as a means of hiding large quantities of property. Construction costs are often less, and protection from storms is usually superior.) Nor are monetary resources all that can be invested. A student entering the university can direct his studies toward aspects of the oceanic scene, in most cases with little

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

or no shift in his field of interest. The student of law, for example, can specialize in Maritime and International Law. The engineer can focus on marine engineering, etc. Servicing and communications industries will also have a market in marine communities. A private sea-air postal system and a few libertarian-edited marine industrial journals might get things off to a good start.

Future articles in this series will report on specific commercial activities which are now thriving in salt water, many of which are probably on the sites of the free cities of tomorrow's voluntary world. KERRY THORNLEY.

(1) THE BOUNTIFUL SEA by Seabrook Hull (Prentice-Hall, 1964).



THE PERMANENT FLOATING VOLUNTARY SOCIETY - V

"Control of foodstuffs in the sea has a beginning similar to that of its counterpart of land. Start with the weeds. When the weeds become cultured, we call them plants. Once culture takes hold, then yield accelerates, and we have more than enough for our immediate needs." ROBERT M. SNYDER (1)

AQUACULTURE

Japan is the world's leading nation when it comes to farming the sea. Over twenty kinds of seaplant, for example, are marketed there for eating purposes. Some of these are harvested wild, but many are cultivated from seed, transplanted to oceanic nets, and harvested about two months later. They are then dried on sheets on bamboo mats. This end product, while it usually requires of the Occidental that he develop a taste for it, is rich in vitamins, and very popular with the natives of Japan.

In 1954 a Dr. Matosaku opened the first commercial shrimp farms in Japan. Nine years later he was shipping seventy pounds of shrimp per day. He has bred shrimp up to eight inches in length. And he is also breeding prawns - a total of 2,860 pounds in 1961, 500 tons in 1962, and more than 1,000 tons in 1963.

Another popular Oriental food is a shellfish called the wreath shell. These have been artificially inseminated and a single batch of 200,000 eggs produced per insemination.

The Japanese also suspend racks from floats and grow oysters upon them in quantities of about 20,000 tons per year. And about 2,200 tons of eels are harvested each year on over 750 eel farms. In addition bream, blowfish, bass, halibut, and grey mullet are also bred by "fish ranchers." And when the market is bad, there are fatteners who will buy part of a fish crop to retain in holding tanks for speculative purposes.

The market is open for the ambitious entrepreneur who is ready to stake out his claim and start farming somewhere beyond the three-mile-long arms of the landgoing pirates of our time. KERRY THORNLEY

(1) From the foreword of Seabrook Hull's THE BOUNTIFUL SEA (Prentice-Hall, 1964). The statistics on Japanese aquaculture are also from this book.

OCEAN FREEDOM NOTES, ISSUE NUMBER 4 [March 1985]

BOOK REVIEW: BLUEPRINT FOR PARADISE, How to live on a tropical island, by Ross Norgrove.

This is essential reading for anyone seriously thinking about moving to a tropical island. Norgrove covers all the details you should consider, such as: How do you select the one island right for you out of many 1000s? What should you look for when buying island property? What should you consider while planning the house you will build? What obstacles will the island govt throw at you? How much will it cost? What about food, water, building materials, repairs, medical care, schools for your kids, jobs, etc.? All this & more is covered here. The author writes from his many years experience as an island-hopping charter boat operator & an island dweller himself.

Norgrove divides all islands into 5 categories:

Category 1 islands are remote, uninhabited, 100s of miles away from any town. A Category 5 island has a town, electricity, hospital, & airstrip. The in-between categories are in-between. In my books I have considered the possibility of living on islands that would fall into his Category 1. Norgrove agrees that living on such island would be difficult but possible, & he discusses the requirements in realistic detail. But his book is mostly about the more civilized islands to which most people are attracted. Excellent job. Recommended.

BLUEPRINT FOR PARADISE, by Ross Norgrove, 1983, 208 pages, 6 x 9, illustrated, soft cover, \$14.95 plus \$3.00 shipping (order #B120) from International Marine Publishing Co., 21 Elm St., Camden, ME 04843.

HOMAFLOTE, THE LIVEABOARD NEWSLETTER

This is another newsletter for people who live aboard their boat. It says: "Homaflote is an Association of boaters who live aboard, or who dream of it. Our aim is the sharing of useful information gleaned from the experiences of the members to enhance home-aboard living."

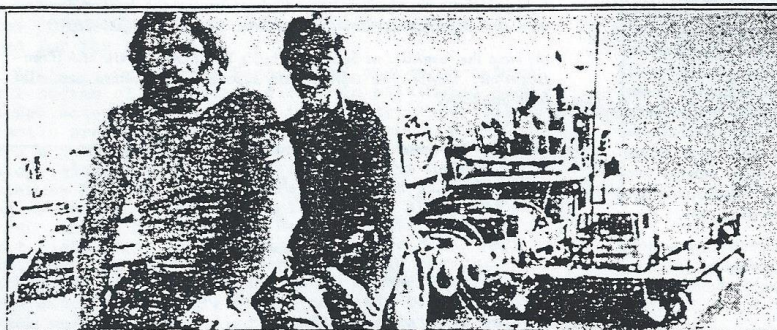
The letters & info in Homaflote seem to be entirely from people who live mostly tied to the dock in various US ports. This contrasts with SSCA BULLETIN which is full of letters from people who are cruising overseas. Membership in Homaflote Assoc. is open to anyone who pays the annual dues of \$8.00, which is also the subscription price of the newsletter. SSCA has much stricter membership requirements.

HOMAFLOTE, the newsletter, runs 16 pages/issue, 4/year, 8 ½ x 11, \$8.00/year. Back issues available, classified ads at 40¢/word. Write: Homaflote Assoc., POB 1853, Punta Gorda, FL 33950.

TROPICAL FRONTIERS NEWSLETTER

Travelers who want to vacation off the beaten track & visit little-known tropical islands can get up-to-date information from TROPICAL FRONTIERS Newsletter. It provides all the basic facts a visitor needs to know about the islands it covers, as well as news from these exotic places. However, the price is high. The 1st issue runs 9 pages, 8 ½ x 11, & 12 such monthly issues go for \$65.00. In this 1st issue there are 2 news items: Tuvalu Councillors resign following charges of nepotism, & Air Polynesia opens N. American office, then a long report on Christmas Island in the mid-Pacific Line Islands, & an article about Private Islands Unltd., a real estate firm that sells islands. The Christmas Island Report covers: people, climate, economy, communications, birdlife, fishing, diving, accommodations, air service, driving, island tours, what to bring, banking/currency, hospitals/health, passports/visas, shopping, church services, & language.

TROPICAL FRONTIERS, about 9 pages per monthly issue, 8 ½ x 11, \$65/year, or \$15 for 3 month trial. Write: Bill Turner, POB 1316, Eagle Pass, TX 78853.



Fons Oerlemans and his wife, Margaretha Arens, rest ashore in Lisbon after crossing the Atlantic by truck-powered raft.

from BUFFALO NEWS
Oct 12, 1983

High Seas Constitute Couple's Open Road

Associated Press

LISBON, Portugal — Belgian Fons Oerlemans said they all laughed when he and his Dutch wife, Margaretha Arens, set off from New York City to cross the Atlantic in a Dodge van.

After a 3,000-mile "drive" on the high seas they arrived wet, weary and victorious in this Portuguese port.

"Not bad for a truck," Mr. Oerlemans, 45, quipped Tuesday from 20- by 14-foot raft he had specially designed to keep the British-built diesel-powered van afloat during the journey, which ended Saturday.

He said he encountered more than a few skeptics before launching the craft Aug. 17 from Brooklyn.

"Everybody said 'no way. It'll topple, it'll sink, the truck will come off the raft,'" he recalled.

The former engineer said there

were no major mishaps on the trip, although hurricane-force winds off the U.S. Eastern Seaboard forced them to turn off their engine and drift for two nights in rough seas.

Also, there was a small explosion of gas from their camp stove. They stopped for two weeks in the Azores so Mr. Oerlemans could be treated for minor burns and stayed an extra week to rest.

Steering from the van's cab, the couple took turns at the wheel in two-hour shifts during the crossing. They used radios to monitor shipping and keep in touch with friends on shore.

The drive shaft of the truck, with its 115-horsepower engine, was linked to the raft's propeller. Navigation was done by sextant.

The raft, kept afloat by two big steel pontoons, contained six fuel tanks with a total capacity of 1,500 gallons and cruised at a steady four knots.

THE PERMANENT FLOATING VOLUNTARY SOCIETY - VI

"Undersea mining in some areas is already big business...Magnesium is extracted directly from seawater. Oil and sulfur have been taken from beneath the sea floor for many years. The ocean is already being opened up for commerce, and before long private industry will be spending more on undersea commerce than Government now spends on undersea warfare." (1)

MARINE MINING

Da Beers Consolidated Mines, Ltd. is engaged in undersea diamond prospecting and mining off the coast of South Africa. Global Marine Exploration Company searches for undersea oil in deep water. Marine Diamond Company, Ltd. (managed by Texan, S. V. Collins) mines by suction for gems. Ocean Science & Engineering, Inc. designs and builds undersea exploration equipment. Richfield Oil Company and Shell Oil Company are building undersea oil fields.

Tidewater Oil Company is engaged in undersea diamond mining. And Yawata Iron and Steel Company of Japan mines iron-bearing sand from the ocean floor.

Other companies are playing less direct roles in mineral exploration of the sea. U.S. Rubber has built and tested undersea storage tanks. Dr. Edwin Link, President of the Link Division of General Precision, Inc. has "camped out" in a pressurized tent on the ocean floor, General Dynamics Corporation is one of the many companies that has conducted studies on undersea transportation. Hughes Aircraft has built submarine robot units to assist in the installation of oil wells.

To list all the minerals that are or will be mined from the ocean would simply be an exercise in recitation of the names of most of the elements. A similar exercise would be to attempt a complete list of the companies involved in one manner or another in ocean mining. The important thing to realize is that the heaviest industry is being drawn into this Second Industrial Revolution in the search for minerals. It is therefore essential that libertarians interested in advancing the concept of a Permanent Floating Voluntary Society do some hard thinking with regard to the ever-present problems of property in natural resources.

The First Claim Theory, for example, as some prominent libertarians espouse it (2), would put most future marine mineral exploitation under the control of an aspiring monarchy which calls itself Aqualandia. For his Majesty King Marion I, in a proclamation dated 10 August 1961, published a claim to "all the lands of the world that exist beneath the oceans and other salt water bodies of the world, except that portion of ocean bottom or other salt water bottom lands which are now claimed as the property of the various government in the world, and where such claim is, as of this date recognized as valid by "International Law." The proclamation goes on to assure that "Aqualandia "does not claim any right to govern, regulate or interfere with the present or future use of the waters above its land," and adds that Aqualandia's is patterned after that of England. This proclamation was published in a pamphlet called "The Aqualandian" (The Aqualandia Society, 6812 Santa Monica Blvd., Los Angeles, Calif., 90038) in July of 1966. But somehow I fail to see, speaking only for myself, how recognition of this First Claim (if, indeed, it is the first) would possibly be in my interest.

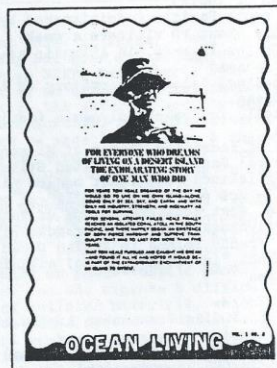
On the other hand, the standard argument of the most ardent admirers of Henry George, which hold that natural resources should not be claimed by individuals or companies or societies at all, but should be "owned in common" in, at best, a sort of universal profit-sharing plan – and which would tend to condemn the present companies involved in ocean mining for coercively monopolizing the mineral deposits – while certainly more rational than the unmodified First Claim Theory, brings up a host of new problems in its place. And putting aside those which fall into the "who-would-administrate" category entirely, this approach would, unless liberalized, go counter to our primary purpose of winning over to the libertarian position those basic industries now mining the sea.

One factor which may bring about a resolution, at least with regard to the ocean, is the technical difficulties involved. By the time one has extracted minerals of almost any sort from the sea a great deal of thought and energy has been applied. It is far more difficult than driving a claim post into the ground or panning gold. Arbitrary First Claims on behalf of Southern California groups and their like will tend to be ignored, and will be next-to-impossible to enforce. And the Georgists, if they can point out to the mining companies a self-interested motive for voluntarily paying out mineral rent fees to the population at large, will find little opposition from laissez-faire libertarians. In the meantime, it is important that the rest of us develop a rational and simple procedure for establishing ownership of the natural resources in the sea, perhaps along the lines of John Locke's "mixing labor" formula. KERRY THORNLEY

(1) THE BOUNTIFUL SEA by Seabrook Hull (Prentice-Hall, 1964).

(2) See for example, J. Dohn Lewis, THE LAND QUESTION, and Butler Shaffer, PERSONAL DECLARATION OF PRINCIPLES, in the Jan., 1965, and Sept., 1966 issues of INNOVATOR.

(Editor's Note: This concludes the 6 part series PERMANENT FLOATING VOLUNTARY SOCIETY which was originally published in INNOVATOR, July to Dec 1966, & reprinted in OCEAN FREEDOM NOTES 1 to 4 in LIVING FREE 24, 25, 27 & 29.)



OCEAN FREEDOM/OCEAN LIVING - "A news-letter-notebook-forum dedicated to methods of achieving personal & economic freedom thru marine ventures." The 1st 3 issues were named OCEAN FREEDOM, then the name was changed to OCEAN LIVING, but the scope remained the same. OF/L published letters from readers & replies, news clippings, book reviews, & evaluations of equipment & supplies for living free on the ocean. A feature entitled "The Ocean Lab" offered "suggestions for research & experimentation to the aqua-frontiersman." 12 issues in all, 96 pages, \$22.

Order photocopies of OF/OL from:
 Jim Stumm, Box 29, Hiler Branch,
 Buffalo, NY 14223.

OCEAN FREEDOM NOTES, ISSUE NUMBER 5 [August 1985]

TROPICAL FRONTIERS NEWSLETTER, Back Issues

This newsletter was reviewed in LF 29 p. 7, but note new (lower) price & address below. Each issue features one little-known island or island group, with some additional shorter items about other islands. Most back issues are available. These are the islands that are featured in the issues published so far:

VOLUME 1

- #1 – Christmas Island (Kiritimati), in central Pacific
- #2 – Tuvalu, in central Pacific (formerly Ellis Islands, part of British colony of Gilbert & Ellis Islands)
- #3 – Maldives, in Indian Ocean (string of coral atolls south of India)
- #4 – Niue, in south Pacific (administered by New Zealand, only about 10 visitors a week)
- #5 – Turks & Caicos Islands, territory of Australia in Indian Oceans
- #6 – Cocos (Keeling) Islands, territory of Australia in Indian Ocean.
- #7 – Manihi Atoll, in French Polynesia (administered from Tahiti)
- #8 – Yap, part of Federated States of Micronesia, in west central Pacific (Associated State of USA)
- #9 – Yap, outer islands (the least modern part of Micronesia, where old traditions linger on)
- #10 – Mangareva, most southern island of Tuamotus in French Polynesia, nearest to remote Pitcairn.
- #11 – Reunion, French island in Indian Ocean
- #12 – Cook Islands, in south Pacific, administered by New Zealand

VOLUME 2

- #1 – ?
- #2 – Maritius, in Indian Ocean near Africa (formerly a British colony)
- #3 – Northern Marianas (Saipan, Tinian, etc.) in west central Pacific (US Commonwealth)
- #4 – Montserrat, in Caribbean (British West Indies)

These back issues cost \$4 each, or \$7.50 for any 2, \$40 for entire volume 1 (#1 to 12). Prompt refunds for any out-of-print issues. Order from: TROPICAL FRONTIERS, 700 Dominik, #1204, College Station, TX 77840. Subscriptions are \$48/year, 3 month trial subscription \$10.

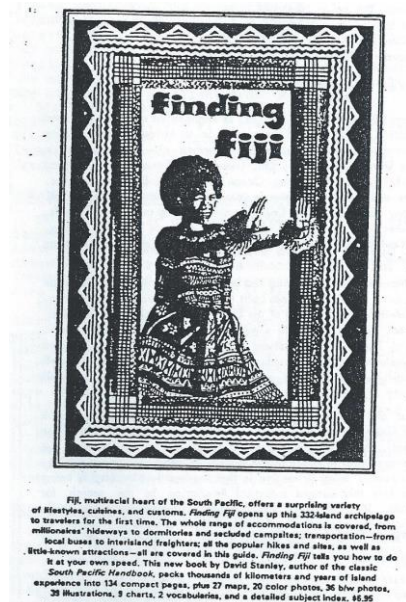
FIJI, HEART OF THE SOUTH PACIFIC

If I was to emigrate, my preferred destination would be either New Zealand or Fiji. "Finding Fiji" is an authoritative new book that covers Fiji thoroughly.

The author, David Stanley, says: "Fiji is friendly. You'll fall immediately in love with the vibrant, exuberant people. Enjoy picture-window panoramas as you travel from exciting island resorts where Australians meet Americans halfway, to remote interior valleys where you can backpack from village to village."

Fiji is easy to reach by air from N. America. Flights to Fiji depart Los Angeles, San Francisco, & Vancouver, with one stop in Honolulu. No visas or vaccinations required.

I also like the way this book is made. It looks like a book that would travel well: good quality paper, tough cover, rounded corners, well designed for slipping into a suitcase or backpack.



“FINDING FIJI” is available directly from Moon Publications, POB 1696, Chico, CA 95927, for US \$6.95.

THE OCEAN LAB by James Parkerson

An Evolution of Solar Stills: The Life Science Library book on WATER says that the maximum output of solar stills having a slanted glass condensing surface over sea water in a basin is 0.13 gallons per square foot per day. Halacy says, in FUN WITH THE SUN (MacMillan 1959), that his still will distill 0.25 gallons per square foot per day (because the wick, unlike the horizontal surface of water in a basin, can always be turned to the sun's rays, & because the wick breaks up the “crust” of the water, ie the “surface tension”?) An improvement over Halacy's aluminum foil lining would be gold plated steel, because it is a better reflector of infrared heat rays, & because aluminum is attacked by salt. Gold is an inert “noble” metal not attacked by anything but “aqua regia.”

(Steel foil with pressure-sensitive adhesive backing & gold plating kits were available from J.C. Whitney & Co. in Chicago. Look for it in stores that sell equipment & materials for customizing cars. -JS)

Also needed: 2 (or 4) penlight cells. Another improvement: loops of rope, dyed black, might make better wicks than black toweling, especially if a wave-swing-powered ratchet turns the mounting shaft circulating the ropes thru the sea water in the bottom. Still another improvement: water evaporates much faster in a vacuum than at atmospheric pressure, & a vacuum forms about a 34 foot column of (fresh) water, ie a drinking straw or chemist's pipette, would lift water only 34 feet, at which point the vacuum becomes complete & the water will rise no farther. The Duke of Tuscany first noticed that vacuum pumps will lift water only 34 feet, which Galileo explained by saying that it is the weight of the air rather than the “pull” of the vacuum. Later Toricelli discovered that atmospheric pressure will support only 30 inches of mercury, thus inventing the mercurial barometer which measures air pressure & altitude. So, if you hoist your airtight still about 34 feet, letting the weight of the water bear on the ocean thru a connecting hose, a vacuum will form above it, accelerating distillation of water & concentration of minerals. A partial vacuum would probably break the glass, even if double high-strength glass reinforced by 2 or 3 bars is used. A partial vacuum is made by leaving an air bubble over the water, strengthening as weight is added rather than appearing suddenly at 34 feet, like a complete vacuum. Also, a vacuum-compression, evaporation-condensation cycle may be necessary, as well as a valve to keep steam pressure from forcing the water out against air pressure. I don't know how soon I will be able to test these ideas, but I am releasing them now, bare as they are because it is just such tricks that may convert sea-dwellers into super-pioneers.

PLASTER OF PARIS:

Though sea water is almost 3% salt & not quite 1/10% calcium sulfate (plaster of Paris) & just 1/100% calcium carbonate, it is the less soluble calcium salts which precipitate in the first pools of salterns. Salt precipitates in the second pool, leaving more soluble magnesium, potassium, & calcium chloride, etc. in the bitterns. Calcium sulfate, when dehydrated at 215-235°F becomes plaster of Paris, a fine white dry powder which, mixed with 15% of its weight of water, quickly sets to a hard mass of gypsum, used for casts for broken bones, statuary, wall plaster, etc. Its solubility is variously described, but it might be waterproofed with Bitudobe, or a glass or other coating. They are making concrete boats now. I wonder if plaster floats could be made. Highest sulfate content in US water is 1/20% at Lubbock, Texas, more than ample to cause scale in boilers & steam irons.

(Reprinted from OCEAN LIVING, v1n6, page I-34, Fall 1968)

COMMENTS: SOLAR STILLS

These are interesting ideas but there's an advantage to keeping your mechanism simple & reliable. On a barren island with plenty of room to spare, you could build a solar still of simple design that would cover a large area, & supply all the drinking water from seawater that you could use. Higher efficiency, but more complex stills might be needed on small boats where space was at a premium. Best use of these high efficiency ideas would be in an industrial application where expected future profits might justify extensive R&D to work the bugs out.

COMMENTS: PLASTER OF PARIS:

Since this was written, a better way to make use of these minerals in sea water has been invented. You put some kind of metal mesh, eg chicken wire, into sea water & run a small DC electric current thru it. Minerals from sea water plate out onto the mesh & fill in the spaces to make a solid structure.

This technique was invented by Wolf Hilbertz, a professor at Univ. of Texas, & was the subject of an article: “Why Not Grow A Building Underwater!” by David Lampe in NEXT, March/April 1980. It was also the subject of an article in MOTHER EARTH NEWS.

Apparently, the material made by this process is rather hard & durable, more like concrete than plaster. It can be made in any size & shape. You simply shape your wire mesh into the form you want. So you could perhaps use this technique to construct an underwater habitat, or a boat hull, or maybe use it to build an on-shore structure by “growing” it in sea water & hauling it up on land when it's finished. A small amount of electricity is all you need, which means you could do it at a remote site using a small wind generator or photo-voltaic panels for juice. This would save you the expense & difficulty of hauling out a lot of building materials, which you could instead extract from abundant sea water. The process would take several weeks or months to complete.

Would any reader who lives near the sea like to experiment with this process & tell us about your results? If you're interested, I'll send you a copy of the NEXT article with all the details.

SSCA COMMODORES ROSTER

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

Dec. 84 issue of SSCA Bulletin (Seven Seas Cruising Assoc., see LF25 p. 6) includes a complete membership list. There are 231 persons or couples listed with home ports all over the world. So there are at least this many people who already live aboard their boats & pursue this sea going lifestyle. I presume only a fraction of the people who live this way happen to be members of SSCA.

Their boats range in size from a 25' sloop to a 95' brig, with most in the 30s & 40s. I suspect that many of the boats over 50 feet are used for chartering or other income-earning ventures, besides being their owner's homes.

EXPLORE TROPICAL ISLANDS

With **TROPICAL ISLAND LIVING** you can discover Hawaii, the Caribbean and South Pacific. Monthly reports bring you current information on the best of the Tropics, with an eye toward either living or vacationing on a tropical island. Learn about moving and living costs, home buying, renting, jobs, schools, taxes and much more!

(Detach and mail with payment)



YES! I want to learn more about island living. Please send the next three issues at the introductory price of \$9.00. Satisfaction guaranteed or your money refunded!

☐ Check ☐ Money Order

(please print)

NAME _____

ADDRESS _____

CITY, STATE ZIP _____

Mail with payment to:

TROPICAL ISLAND LIVING

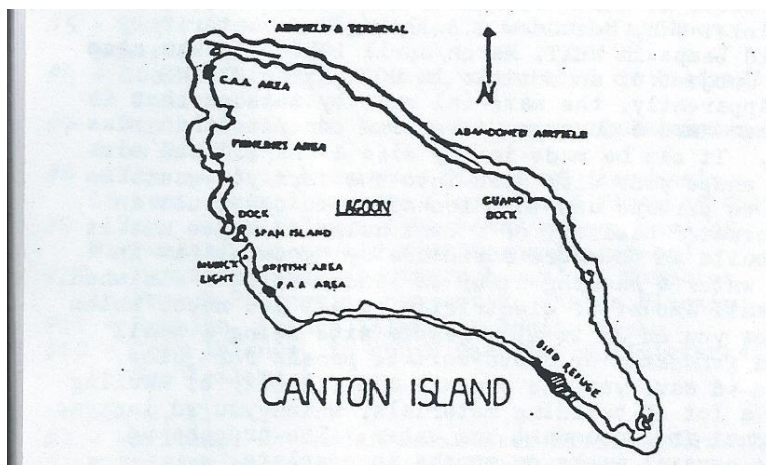
1730 N. Lynn Street, Suite 400-A, Arlington, VA 22209

OCEAN FREEDOM NOTES, ISSUE NUMBER 6 [June 1986]

CANTON ISLAND, YESTERDAY & TODAY

Canton is a lambchop-shaped atoll that lies in the central Pacific at 3 S, 172 W, considerably N of Samoa. It is the largest & most northerly of the Phoenix Islands which are politically part of the Republic of Kiribati. Kiribati, formerly of the Gilbert Islands, is a British colony, includes 3 groups of islands, the Gilberts (Tungaru), Phoenix Islands, & Line Islands. The capital is on Tarawa in the Gilberts.

Overall Canton is 7 miles long by 3 miles, wide, but the land area is merely a low coral sandbank, 17 miles long (circumference), but seldom more than 1800 feet wide, surrounding a lagoon open to the sea. There is a little stunted vegetation & some coconut palms on the NW side.



Guano (bird shit) was mined on Canton in the 19th century, but the island never had a native population & was uninhabited most of the time until the 1930s. Then trans-Pacific airlines began to develop obscure mid-Pacific islands like Canton as refueling stops. In 1938 Pan American Airways built a land runway & cleared coral heads in the lagoon to create a seaplane landing area. During WW2 US military forces built the newer airstrip at the NW corner of the atoll. Pan Am & Qantas (Australia) used the island until long-range, non-stop flights became possible. After that the airstrip was maintained for some years longer in case an emergency landing might be needed, but by the 1960s, the airlines had abandoned the island entirely. Canton enjoyed a brief Indian summer when NASA established a satellite tracking station there in 1965, but that was closed down in '67. During its glory days 100s of people had lived on Canton, only a handful now remain.

Latest word I have on Canton is a letter, dated Oct. 84, published in Jan 85 SSCA BULLETIN from Michel & Jane DeRidder who visited Canton in their yacht "Magic Dragon" (40 foot sloop out of British Columbia). They write:

"Canton...one time trans-Pacific refueling center, then a missile tracking base & communications center, is now a mid-Pacific ghost town. The atoll was turned over to Kiribati by the US. Their 2 Samoan reps returned to Pago Pago just before our arrival. Now just 5 Gilbertese families serve as token caretakers.

"The entrance to Canton Island lagoon, a pass on the west side identifiable by the remains of a WW2 wreck on its southern flank, is safe to enter at slack tide. (The current runs up to 8 knots.) Enter on the port side of Spam Island - a heap of dredgings festooned with sea birds - & hang a left. Either tie up at the wooden dock labeled Swift Boat Dock or anchor off. The big ship dock can be unsafe for small vessels. ...

"Now that supplies are brought into Canton only once or twice a year & the US canteen goods are running out or spoiling, any supplies yachts can spare are welcome. Half a sack of New Zealand onions made a hit. Most of all, help in getting generators, vehicles etc. going is appreciated. The Kiribati people cannot do much for you in return - fresh caught fish, freshly cooked crayfish, flower crowns, songs and feasts."

The other islands of the Phoenix Group: Enderbury, Phoenix, Sydney, Birnie, Hull, McKean, & Gardner, are all smaller & less impressive than Canton, with non-navigable lagoons that are shrunken, landlocked, dried up, or absent entirely. All these islands are uninhabited.

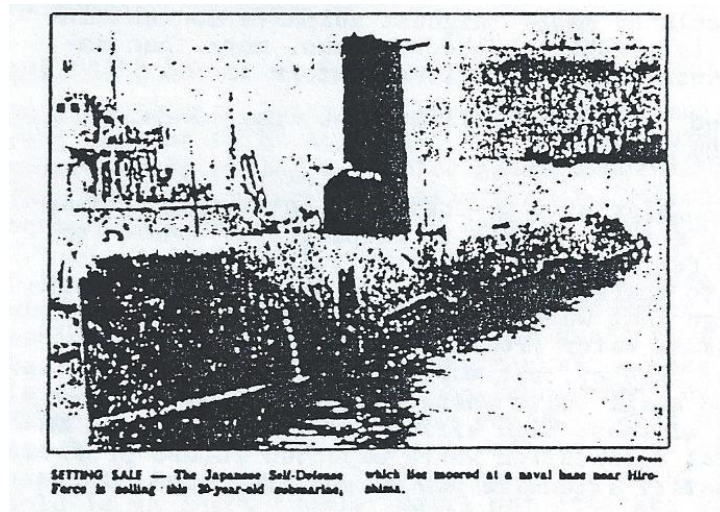
DESERTED ISLANDS FOR RENT

The Maldivian Govt has a deal for you. The Maldives are a group of coral atolls in the Indian Ocean, 400 miles south of India. The largest Maldivian Island is about 3 square miles, & there are about 2000 others declining in size down to specks. Only 202 are inhabited & the rest are for rent. The price to rent a whole island (ie an islet in an atoll) is one rufiyaa (about 14¢) per coconut palm tree per year. You will need govt approval for your planned use of your island, but there are few restrictions, as long as you don't cut down any coconut palms. Most rented islands

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

are used as resorts for agriculture. When you leave, all your improvements will become govt property. But the leases are renewable indefinitely, so you could keep renting your island for as long as you live. (Info from ISLANDS, Oct. 85, p. 12)

JAPANESE SUBMARINE FOR SALE

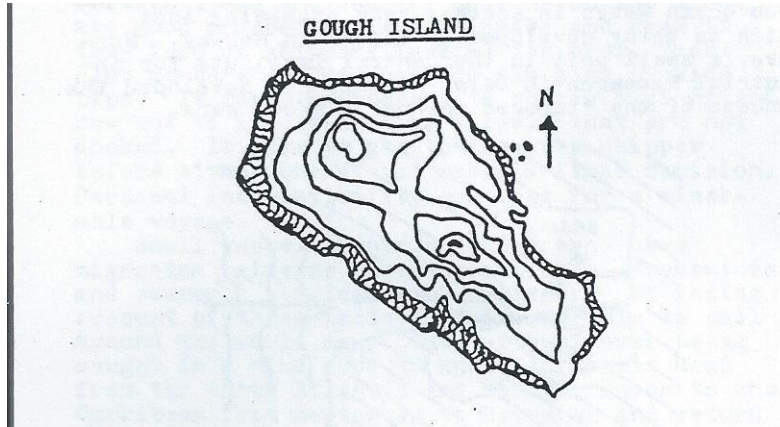


(From BUFFALO NEWS, 5 July 85. See "Live on a Submarine" chapter in LAST FRONTIERS ON EARTH.)

OCEAN FREEDOM NOTES, ISSUE NUMBER 7 [July 1987]

GOUGH ISLAND

Gough Island lies in the middle of the South Atlantic southwest of Cape Town, South Africa, & southeast of the remote island of Tristan de Cunha, at 40°S, 10°W. It has a warm climate, abundant rainfall, & is covered with thick vegetation. There are no large land animals, but plentiful seals, penguins & seabirds. Gough has never been inhabited, or much disturbed by humans, & info about it is hard to come by, which makes it all the more attractive to some. A research expedition from Cambridge University, England, spent 6 months on the island in the 1950s, so extensive info about it is probably buried somewhere in the archives at Cambridge U. If there was a book written about this expedition, I haven't yet come across it.



This poor map is based on the only map of Gough I have ever seen. It reveals that the island is of considerable extent, one of the larger uninhabited islands, but I don't have a figure for its area. It rises up to 2 peaks with a saddle in between, like a 2-hump camel. The higher southern peak is over 3000 feet high. The coast is made up mostly of steep cliffs, but there is apparently a natural harbor or landing place on the east side.

Gough is a British possession & there is a South African weather station on the island, whether manned or unmanned I don't know. If it's an automatic weather station, as seems likely, S. African personnel probably visit once or twice a year to maintain it.

It seems to me that Gough belongs on the short list of most-desirable uninhabited islands.

ISLAND PROPERTIES REPORT

Island Properties Report is a monthly newsletter listing islands for sale, mostly in the Caribbean. They say: "We'll help you find your villa, condo, land or business on the right island for you...Tell you what it's like to live there...Show you how to rent your home for top profits...Help you every step of the way to turn your island dream into a rewarding lifetime reality." Price: \$39/year. Order from IPR, Route 4, Woodstock, VT 05091.

WANT TO BUY A USED SUBMARINE?

New York (AP) – An identified seller has a submarine for sale to "the discerning buyer." The ad in the business section of Sunday's NY Times said the de-armed sub was fully equipped & operational, can carry up to 70 passengers & crew & has a cruising range of 9000 miles. No asking price was mentioned but interested parties were assured the sub was "safe, reliable & excellent for either surface or underwater passage."

"It's not a hoax," said Times spokeswoman Nancy Nielsen. "I haven't seen the sub with my own eyes, but it went thru all of our checks." She said she could not divulge the identity of the advertiser.

The Navy, which sells decommissioned subs for scrap or donates them to communities, denies putting this one up for sale. US Attorney Rudolph Giuliani said selling a submarine isn't illegal. (From BUFFALO NEWS, May 29, 1987)

PRIVATE ISLANDS UNLIMITED

Private Islands Unlimited is a firm that sells islands, in all parts of the world, for prices ranging from \$20,000 on up. They offer advisory services for one year for \$20, with more detailed info on any property for a "modest fee." Contact: Donald Ward, 17538 Tulsa St., Grenada Hills, CA 91344. – Phone: (213) 360-8683.

OIL PLATFORMS

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

An item in EXXON USA, a magazine published by Exxon's PR Dept, says there are now over 3500 oil platforms in place in the Gulf of Mexico. (I was surprised to learn there are so many, but the source seems reliable. -JS) The tallest stands in over 1000 feet of water. A recent development, the guyed tower, can be used in up to 2000 feet of water.

SUPER CRUISE: STARSHIP SLOWCOACH

Captain Ken Peterson writes to say: "I'm currently seeking 3 partners, ages 23 thru 50, male or female, for a multi-year photographic expedition exploring the tropical world."

The 56 foot ship that will be used for this voyage is presently under construction in Maine, scheduled to be launched in June 1988. Participants will move to Maine & spend months until launch acquiring relevant nautical skills. The planned itinerary is south along the East Coast to the Caribbean to visit all islands, then west thru the Panama Canal to begin a circumnavigation of the world, visiting tropical islands & coastal nations. It's estimated the voyage will last 5 years, but all decisions will be made jointly by the participants. All equipment and amenities will be state of the art & first class.

The price for all this, plus clothing, medical & dental care, complete is \$465,000 per person. That price includes a share of ownership in the vessel. So if you have 5 years & \$½ million to spare, & if this is something you'd love to do write for more information to: Captain Ken Peterson, 13 N. Crescent Drive, Eliot, ME 03903, & be sure to tell him Jim Stumm sent you.

SUVAROV ATOLL

Suvarov Atoll is no longer uninhabited. During 1986 the Cook Island Govt appointed official residents to live on the atoll & watch over the place. They are in daily radio contact with Raratonga to call in weather reports & any other news. An airstrip is also being built at Suvarov. At last word it had already been surveyed & was expected to be in service within a few months. I wouldn't have thought there was enough land area at Suvarov for an airstrip, but I suppose the plan is to dredge the lagoon & build up part of the reef to create land for it. Suvarov lies in the direct line from Bora Bora to American Samoa, so it's become a popular stop for yachts.

(Info from SSCA COMMODORES BULLETIN, Jan. 87, p. 35. For more on Suvarov see LF9 p.4 and "Uninhabited Islands" by Jon Fisher, p. 35.)

OCEAN FREEDOM NOTES, ISSUE NUMBER 8 [October 1987]

NOTES ON ISLANDS By: Jan B.

*Of 7000 islands in the Philippines, approximately 6000 are uninhabited (some lack fresh water).

*There are 100s of islands off the coast of New Zealand that are not inhabited.

*There are (possibly) 1000s of islands off the coast of Australia that are uninhabited, many between Port Headland and Darwin on the northwest coast. Most of this coast has never been "chartered." The admiralty charts show "numerous islands & reefs – not charted."

I know a lady who sailed in this area for 7 years visiting many islands & seeing no humans for months or years. She sailed a homebuilt catamaran so she could ground it on the sand and/or mud flats at high tide. The area is very hot. Many islands have no fresh water.

*Coast of British Columbia and Alaska has many uninhabited islands.

FRESH WATER

The simplest system I've come across to provide reasonable quantities is the "Delbuoy." A piston-type pump pumps sea water in & fresh water out thru a reverse osmosis membrane. This pump is designed to be anchored on the ocean floor & is powered by wave action that lifts & drops the float that activates the piston movement. Once installed it just keeps pumping. The mechanics of it are simple & straight-forward & should be buildable in any machine shop, or adapted from many "surplus" hydraulic pistons.

In prototype trials in the Bahamas, this pump provided water to an island for gardens, household use, etc. that saved the island owner several thousand dollars a year in fresh water that had been previously delivered by tankers. I'm convinced the same system can be adapted to shipboard models to provide fresh water by wave action near the ship.

The "Delbuoy" was developed under a "Sea Grant" program by Douglas Hicks at University of Delaware. Doug Hicks & the patent for the "Delbuoy" now seem to be "owned" by: International Science & Technology Institute, Inc., 2033 M St. NW, Washington, DC 20036. Communication with the Institute over 2 years indicates they have (as yet) not been able to put this device into production.

I personally think this device has "LOTS" of interesting possibilities for living free both on the sea & otherwise uninhabitable islands & coasts. Therefore, not being able to pry any info from the Institute and/or a finished device to take apart, I traced down the US patent. It is #4,512,886 issued to Douglas Hicks. Someone may want to explore this device & track down Douglas Hicks who is possibly not with U. of Del. anymore, but is reportedly working for the Institute at their lab in Delaware.

(Editor's Note: The "Institute" may be Hicks own creation to profitably exploit his discoveries.)

OTHER INFO in my files:

*Grains, fruits, & vegetables that grow when watered with 100% sea water.

*Enclosed growing environments for year round growing in sub-arctic conditions.

*Underground houses of clay (adobe) fired in place to create monolithic structures (both very strong & life expectancy of 1000s of years). Also very useful for using materials available on site. It's possible to dig the house (cave) to shape & then fire it.

*Growing in acidic peat soils with addition only of ground rock dust.

*Fuels from organic sources.

*Lots more for isolated survival-living systems.

My interest for the last 25 years has been self-sufficiency, appropriate technology, etc. I am not at the moment able to carry on my own projects as I am now a political prisoner in the California prison system

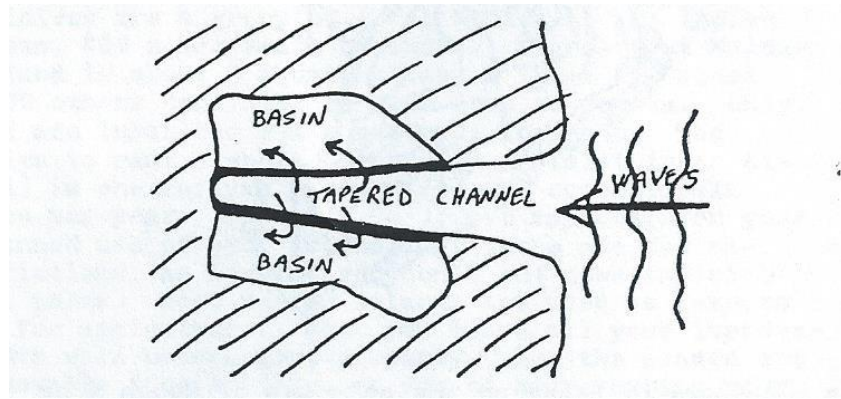
(Editor's Note: Letters to Jan B. can be sent c/o LIVING FREE, and will be forwarded.)

WAVE POWER HARNESSSED

Island residents often must pay a high price for electricity generated by burning fossil fuels. Solar energy may provide an alternative, but islands outside the tropics may not have enough sunlight. Wind power is another option, but wind machines all too often are blown apart in the 1st good storm. Energy from ocean waves is another very promising idea which is being developed by a firm in Norway. Norwave, a small unit in the Central Institute for Industrial Research in

Oslo, Norway, has developed the concept of the "tapered channel," shown here.

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)



A suitable narrow inlet is found, or one is blasted out of a rocky coast. Concrete is poured to create a channel & basins on each side, of ideal shape as worked out on computers. The channel narrows & its floor rises toward the inland side. The basins on each side of the central channel are well above sea level.

How it works: Waves slamming into the coast rush up the channel. As the channel narrows, this bore of water has nowhere to go but up, & it's forced to go higher & higher until it spills over into the side basins. So with each wave, seawater pours into these side basins creating small lakes that are well above sea level. The water from the basins is allowed to fall back into the sea after passing thru a high volume, low head water turbine that produces electricity. -It's an elegant, simple, durable system; low maintenance, & no moving parts outside the powerhouse.

Norwave has built a small wave-power station along these lines on an island near Bergen, Norway. Their model site is producing 350 kilowatts of power at a cost of less than 8¢ per KWH, about half the cost of electricity from a diesel generator. They say their efficiency is 93%, but the design can still be improved, & the efficiency increased.

(Information from ISLANDS, July 87, p. 12)

OCEAN FREEDOM THROUGH CREWING: Diogenes of Panarchia

Boats over 45 feet long with cluttered decks, foreign flags and laundry hanging on the lines are good prospects. Ask skippers and crew if they know of skippers looking for crew. Yacht club members and dockmasters can also provide tips. It may be necessary to borrow a dingy and row out to likely-looking vessels that are not docked. It pays to get to know the skipper before either one of you makes a final decision. Personal incompatibility can make for a miserable voyage.

Despite the fact that so many small vessels make these long voyages across the oceans, piracy is exceedingly rare for the simple reason that the oceans are so enormous. A pirate on the open seas has a difficult time finding victims. The few pirates that exists tend to stay close to the coastlines of Columbia, Southeast Asia and Celebes.

Also contact: Crew Unlimited, 2065 South Federal Highway, Ft. Lauderdale, Florida 33316 and Crewfinders, 2150 Southeast 17th Street, Ft. Lauderdale, Florida 33316.

Recently completed, like a floating grand hotel, with accommodations for over 2000 people. Picture this sailing under a flag-of-convenience, as an independent city-state.

A live-story atrium rises through the Sovereign of the Seas.

Labels in the diagram: Lounge, Two swimming pools, Casino, Bridge, Main, Promenade, Engine room, Living room, Factory atrium, Two movie theaters, Composites.

Sovereign of the Seas

The largest cruise ship ever built — the \$185 million Sovereign of the Seas — has completed the trans-Atlantic voyage from her construction site at St. Nazaire, France. More than \$17 million in original artwork enhances the ship's public spaces, including the Casino — a lobby atrium five decks high.

Facts

- Length — 874 feet.
- Beam — 106 feet.
- Draft — 25 feet.
- Weight — 74,000 tons.
- Passenger capacity — 2,262.
- Staff — 750.
- Average cruising speed — 11 knots.

WASHINGTON (UPI) — The United States is converting a huge barge into a fortified, floating "Fort Apache" in the central Persian Gulf for Navy mine-sweeping boats and helicopters and commando patrol vessels, sources said Tuesday.

The Navy leased the barge from an undisclosed source, possibly a third-country oil company, after Kuwait refused to allow U.S. forces to set up a base on its soil, the administration and Pentagon sources said.

The 100-by-400-foot fortified barge — which one source described as a "floating Fort Apache" — is moored off Bahrain in international waters. It is not visible from shore and does

not give the appearance from afar of being a military base, even though the sources said it is in operation.

The barge holds accommodations for up to 200 people and the plan is to use it as a base for minesweeping helicopters, the six 87-foot Mark-3 boats used by Navy SEAL (sea, air, land) commandos and the six small minesweeping boats brought to the gulf by the assault ship Raleigh, the sources said.

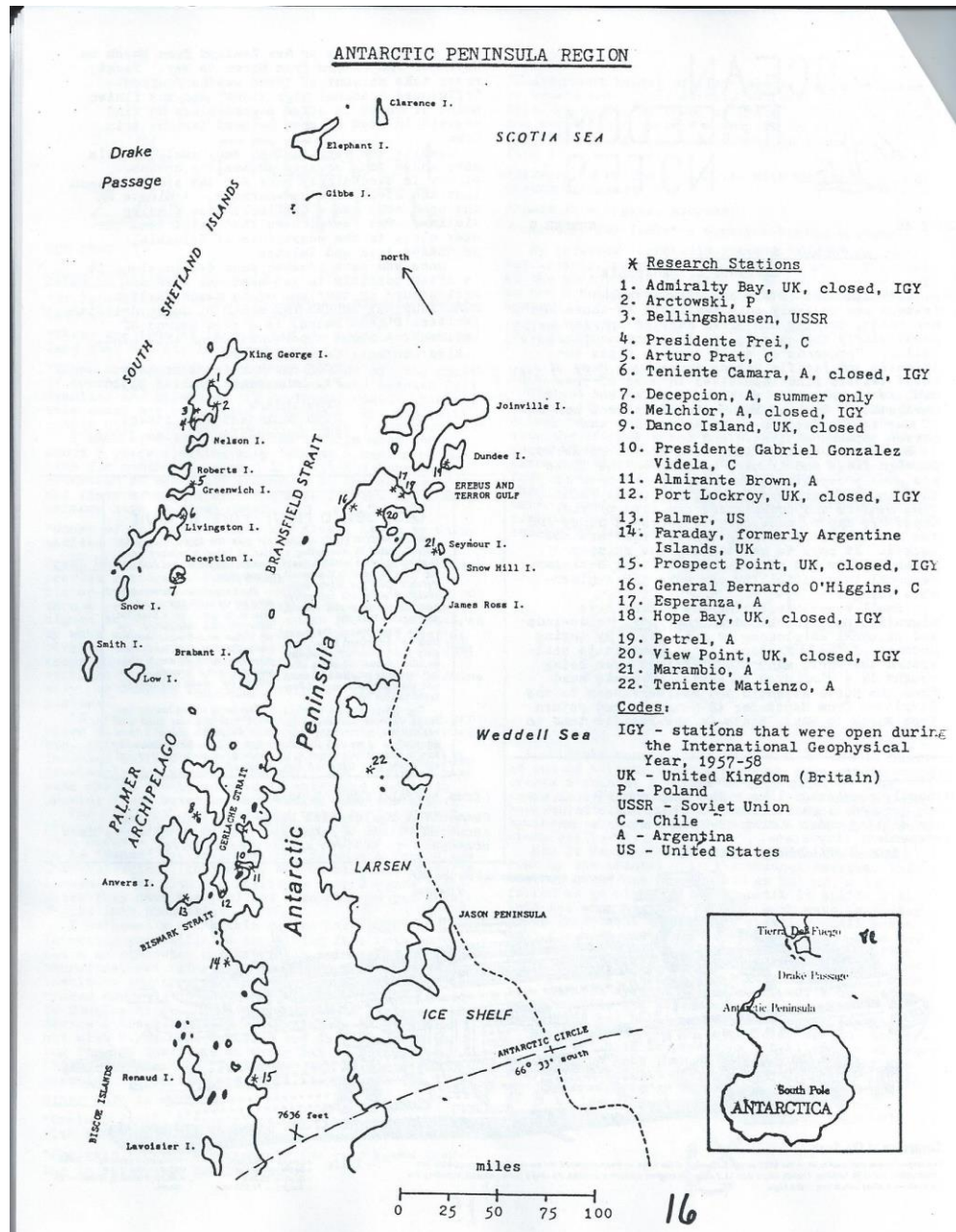
The barge will be heavily fortified with machine guns and other weapons to protect it from attack by Iran, the sources said, speaking on condition they not be identified.

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

(From BUFFALO NEWS, 9/30/87)

COMMENT:

A residential barge like this could be anchored within a submerged reef that would serve as a breakwall to protect against ocean waves.



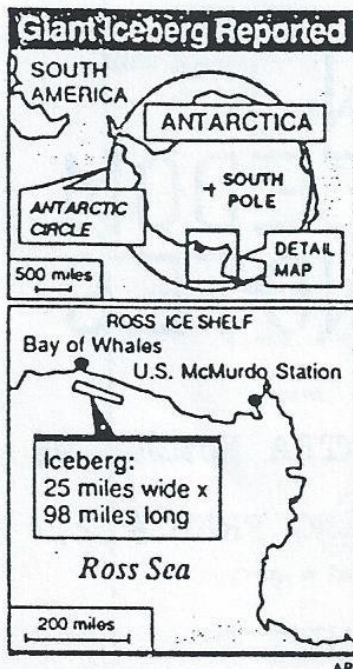
ANTARCTIC PENINSULA

The continent of Antarctica is roughly circular except for the 900-mile-long Antarctic Peninsula that projects northward toward South America. Geologically, the Peninsula is a continuation of the Andes Mtns of S. America. It's inaccessible by sea on the east side where it is guarded by the ice-choked Weddell Sea & the Larsen Ice Shelf, but the sea on the west side is relatively ice-free & navigable for a short summer season. Even so, even the west side is not a hospitable coast. It's mostly all glaciers reaching right down to the sea, except where rock cliffs rise almost straight up out of the water. In the interior, elevations reach as much as 10,000 feet. The Peninsula is mostly an ice-covered mountain range with bare rock only where the slope is too steep to hold ice.

This region has been much explored, exploited for fur seals & whales, & researched. Three nations claim it, Chile, Argentina, & Britain, though their claims remain in suspension as long as the Antarctic Treaty remains in force. These overlapping territorial claims are probably part of the reason why the density of research stations is so much higher here than in other parts of Antarctica, as Chile & Argentina especially maintain several stations each to make their presence felt.

Deposits of several minerals have been found on the Peninsula & nearby islands, though it has not yet been established whether any of these exist in commercial quantities. But traces at least of all of the following have been found: nickel, chromium, cobalt, copper, gold, silver, manganese, & molybdenum.

Antarctica's highest temperatures occur along the northern fringes of the Antarctic Peninsula & the nearby islands. The daily average summer temperatures there remain about freezing for 1 to 4 months, & daily highs are sometimes well into the 40s F. There is some rain in the summer. The east coast of the Peninsula is colder because the mountains block the flow of the prevailing westerly winds off the warmer ocean. Except during the short summer, temperatures in the Peninsula region vary between 0° and 32°F, with occasional colder periods down to -40° below zero.



Gigantic Iceberg Breaks Away From Antarctica

WASHINGTON (AP) — An iceberg twice as big as Rhode Island has broken away from Antarctica and is drifting in the Ross Sea, the National Science Foundation reported Thursday.

"The size of the iceberg in human terms is staggering. If you could somehow transport it to California and melt it, it would supply all the water needs of Los Angeles for the next 675 years," said Guy G. Guthridge of the foundation.

Icebergs often break from the massive Antarctic ice shelf in the Ross Sea, where they are affected by weather and tidal forces. But the new iceberg equals two to three times the normal amount of ice that breaks free in a year.

Despite its size, the iceberg represents no threat to shipping in the region, the foundation said.

The drifting iceberg is about 25 miles wide and 98 miles long, for an area of 2,450 square miles, the foundation said.

Rhode Island, by comparison, has an area of about 1,200 square miles. The iceberg is estimated to be 750 feet thick.

Despite its massive size, the floating block represents only three one-hundredths of one percent of the total area of Antarctica.

It broke from an ice shelf, a region of freshwater ice formed from snow.

That ice has flowed, as a glacier, over time onto the sea surface from the Antarctic land mass. The floating ice near the coastline has many weak areas and large crevasses, scientists report.

The movement of the iceberg was reported by scientists at McMurdo Station, about 450 miles away, and was confirmed by satellite photos, officials said.

"The major significance this has for us, besides the historical aspects, is that it will alter all our maps of the continent," said Terry R. Cooke, a Navy aerographer's mate stationed at McMurdo Station.

The iceberg broke away from the ice shelf at a location known as the Bay of Whales, an inlet into the shelf near the locations of several camps constructed by explorer Richard E. Byrd.

from BUFFALO NEWS, 6 Nov 87

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

HE WANTS TO BUY AN ISLAND

Dear Mr. Stumm,

I am interested in buying an island. Send me your catalog of islands for sale. I am particularly interested in properties that are not under the jurisdiction of any established nation.

Island Buyer

Dear Island Buyer,

The book we have for sale "Uninhabited & Deserted Islands" is not a catalog of islands for sale. Very few of the islands covered in it are for sale. Many are government nature preserves.

As far as I know, there is no dry land anywhere on Earth that is not claimed by some nation, except for the sector of Antarctica known as Marie Byrd Land (which other nations have set aside for USA, but which USA refuses to claim, as it doesn't want to encourage national territorial claims in Antarctica.) Everything else, down to the smallest speck of an island, has been claimed by some nation or other. The best we can say is that some remote islands may not be effectively controlled by the nations that claims them. Also, under presently recognized international law, no island can be owned by any nation unless some little part of it remains above water at high tide, so all submerged reefs & seamounts & similar underwater features remain unclaimed. However it is impossible to live in such places in a conventional lifestyle. One could live on a submerged reef in several unconventional ways, which are covered in the book "Last Frontiers on Earth."

If you want to buy an island, here are some real estate firms that would love to hear from you:

*Boehm & Vladi GmbH, Neuer Wall 2, D2000, Hamburg 36, West Germany.

*Rare Earth Enterprises, P.O. Box 946-x, Sausalito, CA 94966. They also publish a newsletter RARE EARTH REPORT, 6 issues per year, for \$36.

*Private Islands Unlimited, Contact: Donald Ward, 17538 Tulsa St. Granada Hills, CA 91344 - Phone: (213) 360-8683.

*ISLAND PROPERTIES REPORT is a monthly newsletter listing islands for sale, mostly in the Caribbean. Price: \$39/year, order from: IPR, Route 4, Woodstock, VT 05091.

OCEAN FREEDOM NOTES, ISSUE NUMBER 9½ [July 1989]

(Reprinted from LIVING FREE #12, April 1981)

ADVENTURES OF A MASTER SAILOR: BOOKS BY TRISTAN JONES

~*"Ice!"*

~*"Saga of a Wayward Sailor"*

~*"The Incredible Voyage"*

These 3 books form a partial autobiography by an amazing small boat sailor. Tristan holds 9 world sailing records, including world's longest distance sailor. He has sailed 345,000 miles in boats under 40 ft, 180,000 of that single-handed. He has crossed the Atlantic 18 times under sail, 9 times alone. Not bad for a man who was given a medical discharge from the Royal Navy & told he would never walk again.

Very briefly: *"Ice!"* recounts Tristan's solo cruise north along the E. coast of Greenland into the Arctic ice. When his boat becomes trapped in the ice, it becomes a story of polar survival.

"Saga..." brings us Tristan knocking around Europe in small boats.

"The Incredible Voyage" starts in NYC, takes him to Israel, then S. on the Red Sea (thru hostile Arab waters just after the 6-day War), along the E. coast of Africa, across the Atlantic & up the Amazon River, back to the Atlantic, the Caribbean, Panama Canal, and down the W. coast of S. America, overland up to Lake Titicaca, where his is the 1st ocean-going vessel ever to sail on that highest body of water in the world, then on to the Paraguay & Parana Rivers, where he is the 1st ever to sail in the Mata Grosso, which is one of the most impenetrable swamps in the world, still largely unexplored. Along the way, in all his books, Tristan vividly describes the places he sees, & the people he meets, & tells us what it's like to sail a small boat in various waters.

Tristan writes as he lives: boldly, directly. His books make fascinating reading. He reveals himself as a person who doesn't endure bureaucratic restrictions gladly. He mentions a bit of smuggling here & there & times he travelled in certain places w/o all the official papers the local bureaucrats might have wanted him to have.

Cruising the oceans in a small boat can be a very free

way to live, & Tristan shows that you don't have to be wealthy to do it (but it helps). However, cruising on "the shorts" is no life for anyone who requires security, physical or financial. If you think you might ever go to sea in a small boat, I would say that these books are an essential part of your education. And armchair travelers will find them gripping reading. Highly recommended. Tristan also has published another autobiographical volume *"Adrift"* which I haven't read yet.

ISLANDS OF SOUTH CHILE – AN UNTAMED FRONTIER

(Transcriber's Note: A map identifying the islands/locations described is included below.)

On the W coast of S. America, from the S shore of the Island of Chiloe at 43 S latitude, all the way to Cape Horn at the tip of Tierra del Fuego at 56 S, a vast labyrinth of islands & steep sided fjords extends for 1000[s] [of] miles. This region has been mapped only from the air & sea & otherwise remains largely unexplored, unsurveyed, & unpopulated. The region from Chiloe to Puerto Natales, a town (pop. 11,500) at the northern limit of T. del Fuego, which is a distance of about 600 mi, comprises the Chilean province of 48,000 in 1970, almost entirely on the mainland. The provincial capital is the town of Aysen, on the mainland river of the same name, which had a population of 7140 in 1970. This is the most populous settlement in the province.

One reason settlers have been slow to move into this area is because the broken terrain with steep mountains, fiords, & some glaciers running into the sea, makes it impossible to build a road running the length of the province. A motorist has to cross the Andes & travel N or S thru Argentina. On the Chilean side, the only way to get from Chiloe & pts N to places in Aysen province or to P. Natales & pts S is by air or by sea.

On these islands themselves the only settlements that I have seen mentioned are Melinka on Ascension I. with a pop. of 450, P. Lagunas on Melchor I, which has a radio station, & P. Eden on the E side of Wellington I, which was a weather station & seaplane base in the 1950s. In addition there may be a few villages of Alacaloof canoe-Indians, although they numbered only about 300 in 1950 & were dying out. And in certain seasons, one may see a few fishermen & otter & seal hunters along these shores.

The climate on these islands is cold & wet. These mountainous, misty islands are covered with dense forests of both evergreens & deciduous species. In some places, bamboo grows in impenetrable thickets. And an abundance of thorny shrubs also impede surface travel.

These woods are home to numerous birds including, among others, hummingbirds, parakeets, & woodpeckers. The mammals found here include deer, fox, opossum, puma, & various rodents. Along the coasts of one finds fur seal, sea otter, & nutria (similar to beaver) which have valuable fur, & seabirds & shellfish.

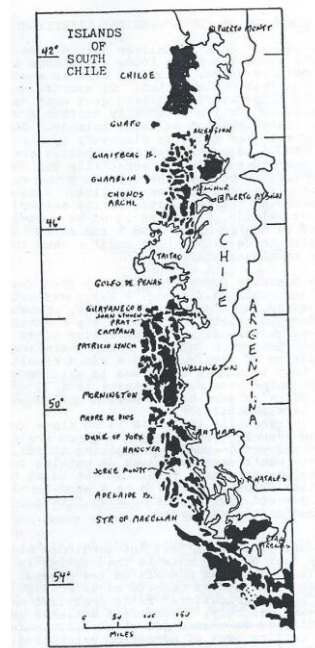
From the Island of Chiloe on S, this region includes the Chonos Archipelago which runs for 130 miles & includes 1000s of islands. Below that lies Taitao Peninsula, which is almost an island since it's connected to the mainland only by the narrow Isthmus of Ofqui. The southern shore of the Taitao is washed by the Golfo de Penas (gulf of troubles), a turbulent bay where many ships have been lost. No outlying islands shelter this coast so the waves roar in unimpeded from the open Pacific & from Antarctica 1000s of miles away.

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

South of this gulf one finds mostly larger islands with even fewer people than the few who live on the islands N of Taitao. This area has been described as: "a vast maze of islands & channels where there is no sign of human life to intrude upon the grandeur & desolate solitude of nature." These more southerly islands often run to several hundred sq. mi. in area & they rise up to a couple 1000 ft. The largest island in this area is Wellington, which is 100 mi. long by 15 to 25 mil. wide & has a highest elevation of 3300 ft. Wellington is mountainous, & has glaciers, swamps, & forests. Fjords deeply indent its coast. There is a tiny settlement named Puerto Eden on Wellington's E coast, but it is otherwise uninhabited.

Further information on the major islands running as far S as the Strait of Magellan is given in the table below. There are still other uninhabited islands lying S of the Strait in the province of Tierra del Fuego, but, since they have an even harsher sub-Antarctic climate, we needn't look too closely at them while these other islands lie empty & unused at more temperate latitudes further N.

| islands | latitude | dimensions
(miles) | populated
places |
|--------------------|-----------|-----------------------|-----------------------------|
| guatecas i's | 44S | 21 sq mi | Melinka |
| ascension | | | |
| chonos archipelago | 44 to 46S | | a few indians |
| over 1000 i's | | | P. Lagunas |
| melchor | 45S | 13 X 5 | |
| guamblin | | | |
| taitao peninsula | 46 to 47 | 75 X 70 | Isthmo de Ofqui |
| guayaneco i's | 48S | | none |
| byron | | | none |
| wager | | | none |
| juan stuyen | 48S | 20 mi. long | none |
| prat | " | 27 X 12 | |
| campana | " | 50 X 12 | |
| patricio lynch | 49S | 27 X 3 to 10 | P. Eden |
| wellington | 49 to 50S | 100 X 15 to 20 | none |
| mornington | 50S | 28 X 8 | none |
| madre de dios | " | | none |
| duke of york | 51S | 23 mi long | none |
| chatham | " | 35 X 12 | none |
| hanover | " | 40 X 5 to 22 | none |
| jorge montt | " | 28 X 25 | none |
| adelaide i's | 52S | | almost entirely uninhabited |



SELF LIBERATION WAYS: THE BURROW-SMITHS OF S. CHILE

(The following is part of an article by El Ray [Rayo/Tom Marshall] which was published in INNOVATOR, Autumn 1969. This lifestyle description is a composite & extrapolation, not a description of actual, existing persons - JS)

"The Burrow-Smiths want complete independence but believe that with enough knowledge & initial equipment they can self-sufficiently maintain late-19th-century technology. They also believe there is no substitute for distance from the American Leviathan & other coercivist power centers. They have secretly constructed & furnished a large underground home & workshop beneath an uninhabited island on the southern coast of Chile. Their facilities include dry dock storage with well-camouflaged entrance for an old 60 foot sailing vessel. In summer some of the Burrow-Smiths sail to small isolated communities away from their immediate area, where they offer repair services not locally available; this provides a small but adequate income source, initial equipment having been paid for out of savings.

"The Burrow-Smiths eat staples plus sea food & what they forage on nearby islands. They are also experimenting with underground hydroponics; the cold wet climate & a desire for unblemished concealment preclude surface agriculture. For power they have a small hydroelectric plant. They produce charcoal for smelting; the island is heavily timbered. They hope eventually to find ore deposits nearby, but in lieu of that, will carefully salvage & reclaim their own worn out equipment plus what scrap they find in their travels.

"The Burrow-Smiths want isolation from what they believe is a dying civilization, but to hedge their bets the isolation will be in one direction only; children become fluent in several languages & dialects so that they may 'pass' easily within both Anglo & Latin countries. In form the family is modified "line marriage" – perpetuating relation suggested in Robert Heinlein's 'The Moon is a Harsh Mistress.' Many adopted as well as biological children assure a large genetic pool. When they become too numerous for a single house they intend to duplicate key equipment, separate into 2 groups, & launch a 2nd similar community elsewhere."

COMMENTS ON "BURROW-SMITH" LIFESTYLE

Concealment on a S. Chilean island does seem feasible since there are 1000s of islands along this 600 mile coast, which are heavily wooded & almost entirely uninhabited. Of course, contact with the authoritarian Chilean govt must be absolutely avoided. I'm reasonably certain govt forces don't set foot on these islands. Under the thick tree cover avoiding discovery by air should be easy. But I would guess that the channels are patrolled by govt gunboats, especially the sheltered inside passage between the islands & the mainland, so that's the area of greatest risk. A secret home probably should be located on the seaward side of these islands, & even so it would be best if one's boat could be hauled up on land & concealed. That would be easier to do with a boat smaller than the 60-footer mentioned above.

The Humboldt Current driving from the S, & the tides ebbing & flowing, & being deflected & funneled by the obstructing islands, probably create strong & tricky currents in the channels between these islands. The prevailing winds blow off the open ocean onto the rocky shoreline. The combination of such currents & winds results in a coast that is highly dangerous to sailing vessels. So such ships have avoided these islands in the past, which is part of the reason why they have never been inhabited.

My judgement is that this is no place for wind powered vessels; fuel-burning engines are a necessity. And yet a community aspiring to self-sufficiency wouldn't want to depend on outside supplies of gasoline or diesel fuel. So the ideal transportation solution seems to be a wood-burning steam powered launch, fueled with firewood from the abundant local forests.

Another source of food not mentioned above would be the deer & other animals that abound in these rain forests, & sea mammals on the coast. Small food animals such as rabbits could be raised. Also some "proto-agriculture" could be practiced w/o compromising security: Food trees & bushes growing naturally could be encouraged with a little fertilizer & cutting back of competing vegetation. Other food trees could be planted here & there, etc.

On these large islands with their high elevations & abundant rainfall, there would be ample water power to supply all domestic energy needs. Small hydropower systems could easily be concealed beneath the vegetation, or even completely underground, if that was deemed necessary.

Running a repair business serving outsiders poses a much too serious threat to security in my opinion. It would be better not to have that much contact with outsiders. Furthermore, that may not even succeed as a business venture, since about the only customers one can find on these shores would be a few scattered Indian villages. Members of a secret community probably should stay away from the few larger ports to avoid attracting the attention of some govt functionary. A preferable alternative source of income would be from selling furs from sea otters & fur seals.

In order for children to pass in outside society, more than just a knowledge of the language would be required. They would need to have a whole repertoire of skills, some quite subtle. They could only get these skills by living outside.

Perhaps older children or young adults could go outside to school or to work. But some of them will find the "bright lights" seductive & will not return. Those who do return may have divided loyalties & be a security risk. All in all I'd be inclined to avoid all contact with outside except for those people who specialize in "import & export," in going outside to buy, sell, or to gather information.

I've lived in collective houses myself & seen friends experiment with group relationships. Based on that I'm skeptical about the chances for success of "line marriages" or other unusual arrangements. The form I would rate most likely to succeed would be mostly monogamous unions within an extended family made up of numerous blood relatives (and some persons adopted in), headed by a strong patriarch or matriarch. Young people could go out to find marriage partners who would be brought in. Or better yet, children could be adopted & raised to be future marriage partners. That's preferable because children would be more easily socialized into this lifestyle than people who have grown to adulthood outside.

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

The most secure arrangement would be for most marriages to take place within the family, which would often mean between close relatives. First cousin marriages used to be much more common than they are now, with no apparent harm. Bringing in new breeding individuals now & then should be enough to keep the gene pool from becoming harmfully inbred over many generations.

While variations of this lifestyle could be set up in many places, the islands of S. Chile are particularly suitable because of their physical characteristics. Some additional advantages are: being in the southern hemisphere, this region wouldn't suffer as much in the event of nuclear war in the North. Also, these islands lie downwind of a vast empty stretch of S. Pacific & Antarctica, so the air quality must be among the cleanest in the world, & there would never be any nuclear explosions upwind to create a fallout problem.

BOATS (1980) by John Freeman

With the drop in success at fishing, the higher docking fees, & a general inclination of the well-heeled to want nice shiny polished boats, there are bargains galore for the boat buyer. The best places are up & down the East Coast & Canada. An acquaintance has even made considerable money

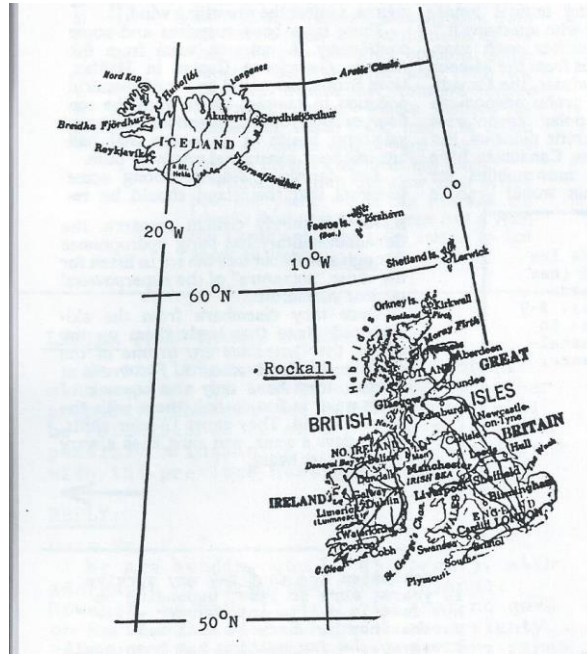
hauling smaller bargain price East Coast boats across the country – at the moment he is paying \$35 a month at a Virginia Beach yacht club & living on a 35 ft boat he got for less than \$1000 – where could you get better rent than that inland?

The West Coast berth & slip fees are usually atrocious but a number of persons beat that by staying anchored out a ways, & rowing a dingy. No one in their right mind ties up at Latin ports along the West Coast. Port authorities are very greedy, corrupt & dishonest. After weeks of picking around in the terrible weather of the “below Mexico” coast, I can also validate the claims of this being a very dangerous area weather-wise. After a recent tour around the waterways of Asia, I just wished life wasn't so cheap in this area of the world. –For the vonuer who uses enough Grey Matter, boating is a good answer.

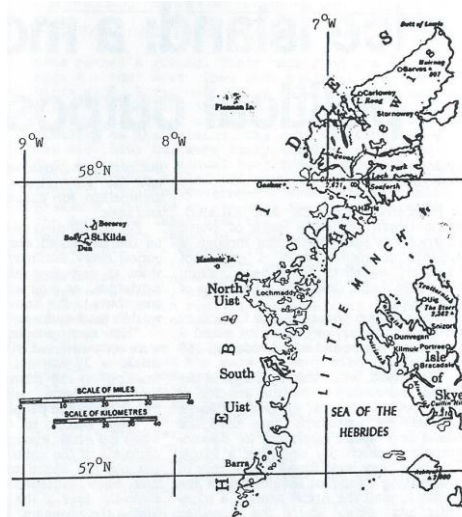
OCEAN FREEDOM NOTES, ISSUE NUMBER 10 [Dec. 1989]

LONELIEST BRITISH ISLES

1) Rockall is an uninhabited, 70-foot-high pinnacle of rock that lies in the North Atlantic, south of Iceland, & west of Scotland, 225 miles west of the Hebrides Islands, at 58°N, 14°W. Rockall was claimed by Britain as a territory in 1955. Such an isolated rock, inhabited only by seabirds, has no value in itself, but govts are eager to lay claim to such features because it gives them rights to natural resources in the ocean for 200 miles around.



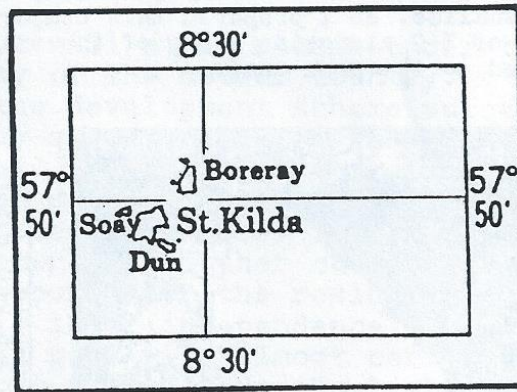
2) St. Kilda is the main island of the westernmost group of outer Hebrides, lying 42 miles northwest of North Uist, well away from the other Hebrides at 57°50'N, 8°30'W [sic]. St. Kilda is 3 miles by 2 miles, rising to 1372 feet in the northeast, with precipitous cliffs & a landing place on the south side. It was continuously inhabited from ancient times until 1930 when the surviving population of 36 was taken off, at their own request, & moved to Scotland. It is now a bird sanctuary. The island, also known by its Gaelic name Hirta, has been the property of the Macleods clan for centuries. The group also includes the smaller islands of Boreray, Dun, & Soay. Boreray lies 4 miles northeast of St. Kilda & is 1 mile by ½ mile in size.



An eye-witness account of St. Kilda is provided by Tristan Jones in his 1978 book "Ice!" He says on page 124: "I spied the mighty capsized cliff of Boreray, the most remote part of the British Isles. I hove to, had breakfast, then worked into Village Bay, where there had once been a settlement."

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

"As I lowered the mainsail, the 12 foot spar fell onto the deck with a sharp noise.



At this, a MILLION birds lifted up from the cliffs, which rise over 1400 feet straight from the ocean, & darkened on the moon sky. They were sea birds of all kinds. That rise of life from the white cliffs of Dun & Boreray was so violent that I was genuinely frightened in case they should attack the boat.

"The granite cliffs were white with bird shit. The sky was dark with rainclouds, which swept low over the lonely peaks of grey Hirta, the main island. From the deck, I had seen sheep climbing the steep cliff faces, looking like goats.

"I went ashore & looked around the old village. Here, people had lived from the Iron Age on, right up until 1930. In ancient times, they were the most isolated people in the Western world. Their life was very tough indeed. They could not fish from boats because there was no wood for boat-building, so they fished from the rocks, where great Atlantic seas rushed & gushed. Their main food was birds' eggs & birds' meat. They made their clothes out of birds skins & feathers. Then sheep were introduced & for a while life improved.

"Thru all these centuries there were only 3 families on the islands. The only visitors, from the mid-1800s on, were stray travelers coming to rest & the twice annual boat from the mainland. In 1912 influenza killed off many on the island. In 1930, the British Government, under strong public pressure, decided to evacuate the island. All 36 of the surviving islanders (the population in 1850 had been 110) were taken to Scotland & eventually they drifted off to disappear in the slums of Glasgow.

"All the thatched roofs had blown away from the old cottages. Inside tough grass was growing. The preacher's house, biggest house in the village, still had its tin roof. I looked around the tumbled stones of the 3 churches, then made my way back to the boat.

"How had Iron Age people reached these remote rocks I wondered? Why were so many bird beaks on the floors of the cottages? That last I figured out: they had used the bird beaks in place of wooden pegs, to fix the rush thatch to the roofs.

"St. Kilda is now (1977) a British Government wildlife reserve, & there is a rocket tracking station on the main island of Hirta. I am told there are even more birds there now!

"I watched the moon set beyond the stupendous cliffs of Boreray, a whole island tipped over on its side. Cliffs 1500 feet high, ghostly white under the moon, with millions of skuas & guillemots clinging to the ledges, so many that the black granite rock looked like some spiritland rearing straight up into clouds."

(Jones visited St. Kilda in 1959 while sailing alone from Scotland to Greenland.)

LETTER FROM THOMAS R.E.

We are interested in making contact with sellers of island property, or other property, wherein the "sovereignty" will be relinquished as part of the sale while possibly maintaining a protectorate status with the previous host government.

REPLY:

Dear Mr. R.E.,

We are sending you LF 45, page 5, with addresses of firms that sell islands. However, we have to tell you that no govt on Earth will sell land with sovereignty to any private person or group. Very rarely there will be a sale of sovereignty to another govt only. The only way you can acquire sovereignty to presently-habitable-land is to wage war & take it by force. If you are not willing or able to do that, then I'm afraid it can't be done.

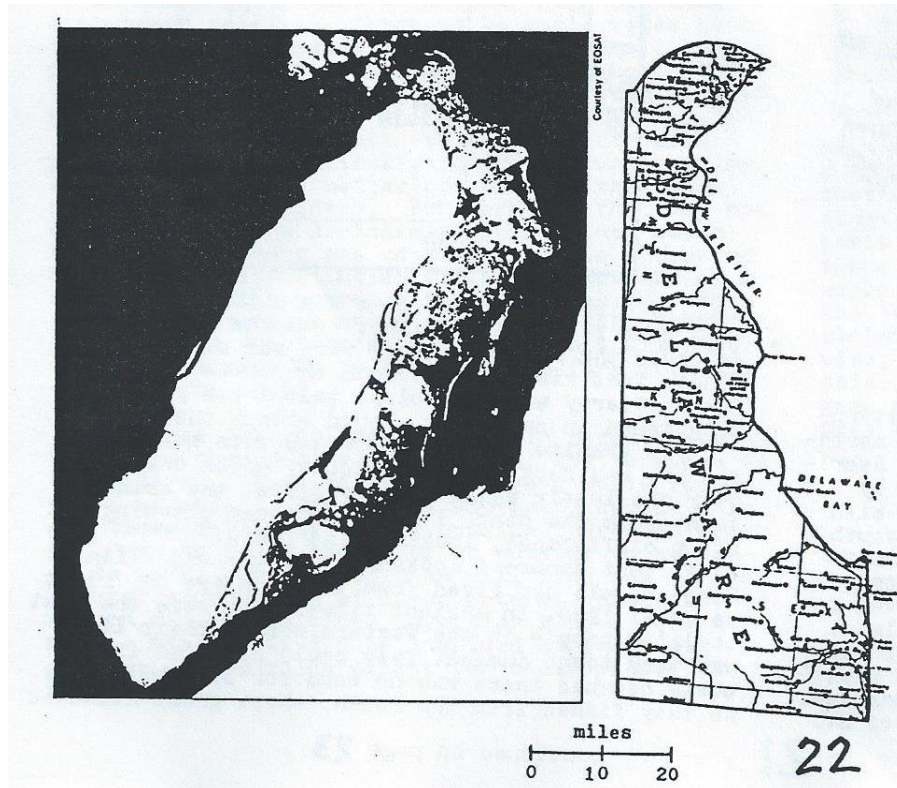
The best a private firm may be able to do is to negotiate a Freeport agreement with a govt, promising to economically develop some impoverished part of that govt's national territory. Such an agreement will typically abate some taxes for a specified period of years, & will give the first some quasi-govtal [governmental] powers, but the Freeport will still remain under the sovereignty of the mother country.

If the development scheme succeeds, the govt may abrogate the agreement & take back full control of the Freeport even before the date when the Freeport agreement is supposed to expire. It might be possible, before the mother country takes back the Freeport, for the residents of it to proclaim their independence. But then the national govt will almost certainly send in troops to put down the "rebellion," so a war for independence will have to be fought to make the proclamation effective.

So in this case as well, obtaining sovereignty requires war. Existing nations are not eager to see upstarts entering their exclusive "club," so they make the entrance requirements high. You have to kill like a govt as a minimum requirement before they will let you into the club of nations.

ICE ISLAND

In 1987 a gigantic chunk of ice broke off the Ross Ice Shelf in Antarctica & became a separate floating island (see LF45 p.5). This iceberg, designated B-9, at last report had drifted about 200 miles NW to the middle of the Ross Se. B-9 is so immense, about 20 miles by 90 miles, that its size is hard to visualize. So I prepared this comparison of a satellite photo of B-9 along-side a map of the state of Delaware, both reduced to the same scale:



Estimates are that B-9 may survive 10 years, more or less, depending on how fast it drifts into warmer water farther north, where it will melt & break up. So far melting has been negligible. It will last longer if it runs aground & gets stuck at a high (cold) latitude, which it may do since it extends about 750 feet below waterline, in addition to rising another 150 feet above the water. Like all Antarctic icebergs, B-9 is generally flat on top so that a plane with skis could probably land on it as it is, & an unimproved ice runway could easily be constructed.

Big as it is, B-9 is nowhere near record size for an iceberg. That distinction is held by a berg that was sighted in 1956 that was 208 miles by 60 miles, for a total area of 12,000 square miles. (Photo & info from ISLANDS, Feb. 89)

[SEE IMAGES ON NEXT PAGE]

Ice island: a mobile research, political outpost for Canada

by John F. Burns
New York Times

HOBSON'S CHOICE ICE ISLAND, Arctic Ocean — While much of North America has been sweltering through a summer of record heat, a group of Canadian scientists have been rafting across the Arctic Ocean on a leviathan of floating ice.

The platform chosen by the Canadians for their polar odyssey is an ice island 5 miles long, a mile and a half wide and 150 feet thick.

Since 1983, when they first sighted the island and named it for the director of their polar research program, George Hobson, the Canadians have used the island as a mobile laboratory for oceanographic research. By unfurling a Maple Leaf flag, they have found a new way of proclaiming Canadian sovereignty in the waters around the Arctic islands, a triangular archipelago where the Canadian government has become increasingly vigilant against intrusions by Soviet and U.S.

nuclear submarines, which are believed to use the labyrinthine channels of the archipelago for games of strategic hide and seek.

For the 30 men and women who work on the ice island during the peak work period every summer, the operation provides an engaging mix of adventure and patriotism, as well as an opportunity to contribute to the knowledge of one of the world's least understood seas.

"How many people think, 'Gee, I wish I were on a deserted island?'" said Richard Brink, a 29-year-old seismic technician working on the island after a winter in Calgary, Alberta, selling mutual funds. "Well, we're the people who are doing it."

From March to October each year, when the Arctic emerges from the 24-hour darkness of the polar winter, the Canadians use the island to probe phenomena that have intrigued polar adventurers since the days of the Arctic pioneers. But unlike the pioneers, the Canadians have diesel-heated cabins, snowmobiles for transport and food that would grace a

good hotel.

From a site that is barely 700 miles from the North Pole, the scientists are sampling marine life and fossils 1,700 feet down on the ocean floor, detonating underwater seismic explosions that reverberate 20 miles into the earth's crust, and monitoring polar currents and winds.

Each year, they learn more about what created the Arctic Ocean and its forbidding climate, what mineral riches and living things it conceals, and what causes the phenomenon known as the Arctic gyre, the force that pushes the ice pack around the North Pole on a clockwise course, against the prevailing wind.

There have been surprises and some controversy. A research team from the Atlantic Geoscience Center in Halifax, Nova Scotia, has found traces of chemical pollution in samples taken from the sea floor, raising troubling questions about the long-term health of an ocean that had hitherto been considered relatively pure.

And despite a feeling among some scientists that the island should be re-

served for purely civilian research, the Canadian military has hung hydrophones through a shaft cut into the ice to listen for the sonar "signature" of the superpowers' nuclear submarines.

Once they disembark from the ski-equipped plane that lands them on the island, the Canadians are in one of the most lonely places on earth. For weeks at a time, they have only the squawk of short-wave radios to link them with the outside world. They work 12-hour shifts, seven days a week, and must keep a wary eye for polar bears.

from August 21, 1988
Seattle Times/Seattle Post-Intelligencer

But in August, when temperatures rise above freezing, the bleakness gives way to beauty. Thaw sets in with Arctic summer, melting the ice into broad pools of water that take on the blue-green shade of the ice. When it freezes again it forms sheets that tinkle underfoot like glass.

Ice islands are related to icebergs, yet scientifically distinct. An iceberg, such as the one that sank the Titanic, is a product of glaciers' breaking up as they reach the sea, but an ice island is a splinter of an ice

shelf, a thick mass of glacial ice that radiates seaward from polar shores.

The ice island occupied by the Canadians is one of only a handful to appear in the Arctic Ocean this century. Like almost all the others, Hobson's Choice was "calved" from the Ward Hunt Ice Shelf, which clings to the northern tip of Ellesmere Island.

Since it broke away from the coastline, the island has moved to a point more than 440 miles southwest of the ice shelf and 60 miles from the closest land. Judging from the course of an ice island known as T-3 that American scientists occupied intermittently between 1952 and 1974, the Canadians believe that Hobson's Choice will move out of waters claimed by Canada in about 1992, into the ocean north of Alaska and onward into the ice pack off Siberia's northeastern coast.

Projecting from the slow melt of the past five years, which has trimmed the island's thickness about three feet a year, the Canadians expect the island to last about 40 years.

OCEAN FREEDOM NOTES, ISSUE NUMBER 11 [May 1990]

ANTARCTIC ICE MINING

Many parts of the world are suffering from critical & growing shortages of drinking water. Yet a virtually unlimited supply of water in the form of fresh water ice exists in Antarctica, where 90% of the ice in the world may be found. Every now & then someone suggests towing Antarctic icebergs to some part of the world to relieve a water shortage. The problem is that icebergs are irregularly-shaped & ungainly to tow. Worse than that, a large part of the iceberg would melt enroute, especially if it's taken across the tropics to a destination in the northern hemisphere where most people live.

It may be a better idea to put Antarctic ice into some kind of water-tight shipping container. The shape & dimensions could be designed for easy transport, perhaps by towing, or by stacking up on container ships. Then the ice that melts en route would not be lost but would arrive at the destination as liquid fresh water. I have worked out the details of how the job might be done speedily & efficiently.

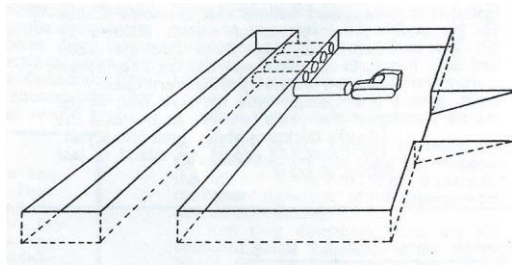
An ice quarry would be set up near the ocean on some large expanse of fresh water ice in Antarctica, either on an ice sheet like the Ross Ice Shelf, or on a huge, flat-topped Antarctic iceberg (see LF 54, pg. 5). The ice would be quarried by means of horizontal heat drilling. Scientists already use vertical heat drilling in Antarctica to extract cores a few inch in diameter & 1000s of feet deep in order to learn about ancient atmospheric conditions by studying tiny bubbles of air frozen into the ice eons ago. My idea is to take that already-proven process, lay it over on its side, shorten the length, vastly increase the diameter, & use the shipping container itself as the drill casing. Here are the details of how it would be done:

HEAT DRILLING

First, 2 parallel trenches would be cut into the ice. This would be done using ice milling machines such as those that have already been used in Antarctica to construct the New Byrd Station. These trenches would both be cut to the same depth & their depth & distance apart would be determined by the dimensions of the metal cylinders used in drilling the ice & shipping it to market. These shipping cylinders should be as large as can be conveniently handled for economy of scale.

The depth of the trenches would be a little greater than the diameter of the shipping cylinders & the distance between the 2 trenches would be slightly less than the length of the cylinders. One trench would be wide enough to allow maneuvering room for heavy equipment (tractors) & there would be a ramp leading down into it from the surface. The other trench would be simply a narrow cut.

After the trenches are prepared, cylinders or ice would be cut out of the ice sheet in this way: An empty shipping cylinder would be placed up against the uncut block of ice that separates the 2 trenches at a right angle to it. The end of the metal cylinder against the ice would have a removable cover that would be taken off, leaving that end open. The other end would have to have a valve that could be opened to allow the air to escape during drilling. A heated cutting ring of the same diameter as the shipping cylinder would be temporarily fixed in place on the open of the cylinder. This ring would be heated in some way, probably by burning some kind of fuel, just hot enough to melt ice. While the ring is hot, the tractor would push the cylinder into the ice-face & the heat ring would melt out a "piston" of ice that would slide into the shipping cylinder, as the cylinder moves forward, filling the cylinder with ice just as the heat ring breaks through into the open air of the 2nd trench. The heat ring would then be removed & the water-tight cover would be replaced on the cylinder & sealed. The air valve on the back end would also be closed to make a water-tight seal all around. The tractor would then back up & pull the shipping cylinder, now filled with ice, out of the hole it has drilled in the ice. The cylinder would be dragged up the ramp to a storage yard & and an empty cylinder would be brought back down to be filled in its turn in the same way.



These ice-filled containers would be sent by sea to markets anywhere in the world. The seaward edges of ice shelves & icebergs in the Antarctic are usually nearly vertical cliffs that may be 100s of feet high. To get the shipping cylinders down to sea level would require either a long ramp, or a crane extending out over the edge of the cliff. These containers could be stacked up on ships. Or, maybe a better idea, they could be fastened together end-to-end & made into long trains with flotation cells if needed so they would float on the ocean, so they could be towed by ocean-going tugs, perhaps 1000s of miles to market.

OCEAN FREEDOM NOTES/OCEAN LIVING (1967-1990)

The destination would be an ice-port that could be built on any seacoast. The containers would be hauled ashore & emptied. As a bonus, the ice could be placed 1st into insulated warehouses & exploited for refrigeration & air conditioning while the ice melts, before being consumed as water. Small amounts of water could be shipped inland by tanker truck. Larger amounts would be distributed more efficiently by pipeline.

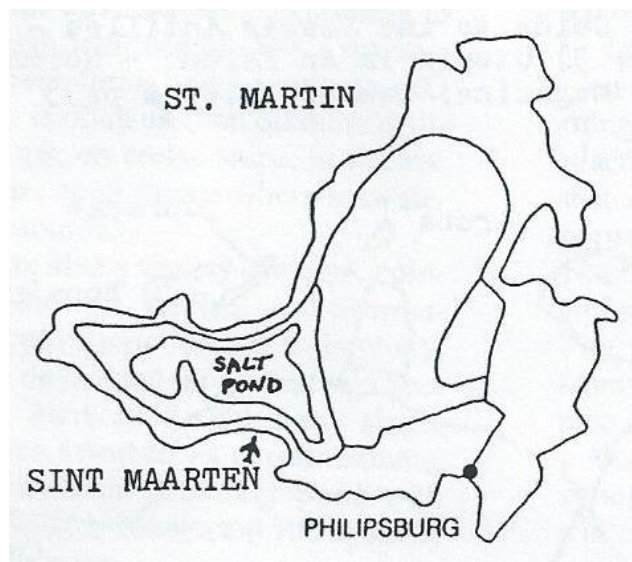
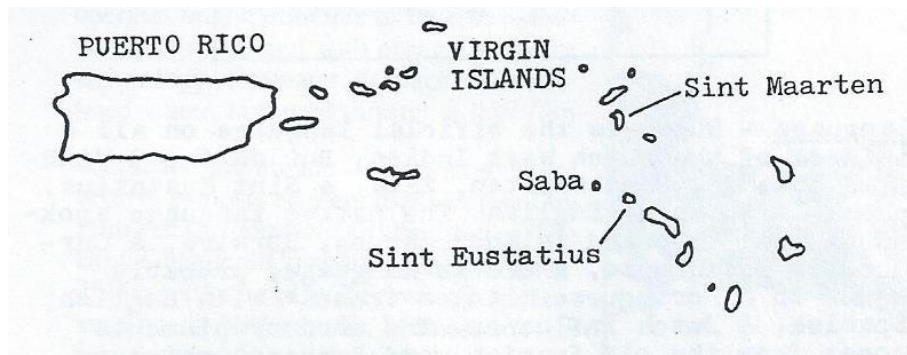
DESTINATIONS

- 1) Southern California, where there is both a need for fresh water, & plenty of wealth to pay for it.
- 2) Australia, a short haul from Antarctica. An ice-port could be built on the south coast of Australia with pipelines running north & west into the driest areas. These regions could become as densely populated & prosperous as California once they had an assured supply of abundant fresh water.
- 3) Middle East. Saudi Arabia & Kuwait probably don't need Antarctic water since they have the resources to get all the water they require by desalinating sea water. But other countries in the region are not as lucky. It's estimated that the population in that area will double by the year 2010, & they'll need twice as much water as they use now. So, ice-ports could be built somewhere in the Persian Gulf and on the Red Sea coast, with pipelines running to Jordan, Israel, Syria, Iraq, & Egypt.
- 4) Africa. Ice-ports on the east & west coasts could feed pipelines running into the sub-Sahara & even into the Sahara Desert itself. Antarctic water could be piped in to refill Lake Chad which is rapidly drying up.
- 5) Islands. "Icemen" could sail around routes of islands that lack dependable supplies of fresh water, dropping off containers of icewater & picking up the empties. Empty containers from all iceports would be returned to Antarctica to be refilled.

DUTCH WEST INDIES

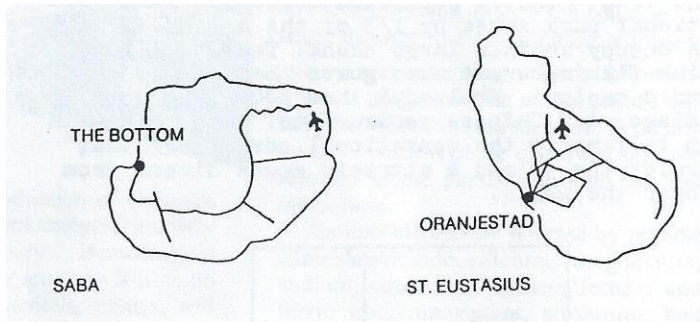
Sometimes the island colonies of a mostly-free country offer even more personal freedom than the mother country, due to low population & geographical isolation. This may be the case with the 6 islands that constitute the Dutch West Indies (aka Netherlands Antilles). These islands fall into 2 groups: the Leeward, or ABC Islands (Aruba, Bonaire, & Curacao) off the north coast of Venezuela, & the Windward Islands (Sint Maarten, Saba, & Sint Eustatius, also known as Statia) which lie east of Puerto Rico.

Netherlands Antilles, with its capital at Willemstad on Curacao, now includes only 5 of these 6 islands. Aruba, the "A" of the "ABC" islands, was a member of this group until Jan 1986 when it became a separate, self-governing island within the Kingdom of Netherlands. So it's still Dutch, but no longer subject to the govt on Curacao.



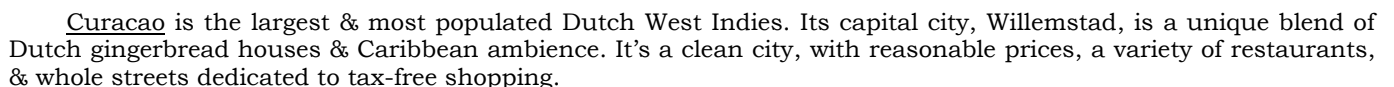
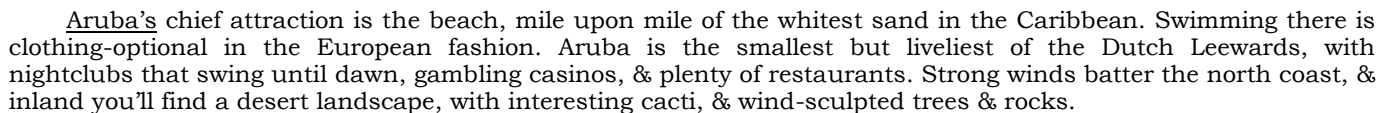
Sint Maarten is the Dutch, southern half of an island, known as St. Martin on the French side, which is divided between Holland & France. Sint Maarten has the largest population of the 3 Dutch Windward Islands, & unlike Saba & Statia, it offers the casinos & nightlife that most vacationers like to find on a tourist island. Travel is unrestricted between the Dutch & French sides of the island, & there are no customs or border formalities. Travel by air to & from Saba & Statia, & usually travel by boat as well, is done via Sint Maarten, whose international airport affords connections with the outside world.

Saba is a 5 square mile dome of rock, an extinct volcano that rise straight out of the sea, reaching 300 feet. Its shoreline is all steep cliffs with no beaches, & no real harbor, although there's a place called Ladder Bay where boats land. There are 2 villages on Saba, Bottom, at an elevation of 900 feet, lies in the bottom of the valley that was once the volcano's crater, & Windwardside, higher up on the rim of the crater at 1900 feet. Despite there being almost no level land on Saba, they managed to build an airport, though one with such a short runway that landing on it is almost like landing on an aircraft carrier. A local flight from Sint Maarten flies in & out of Saba each day. About 1000 people live on Saba, some 60% of whom are white, & there are more women than men, since many of the men are away working on ships or on other islands, because there isn't enough employment on Saba itself.



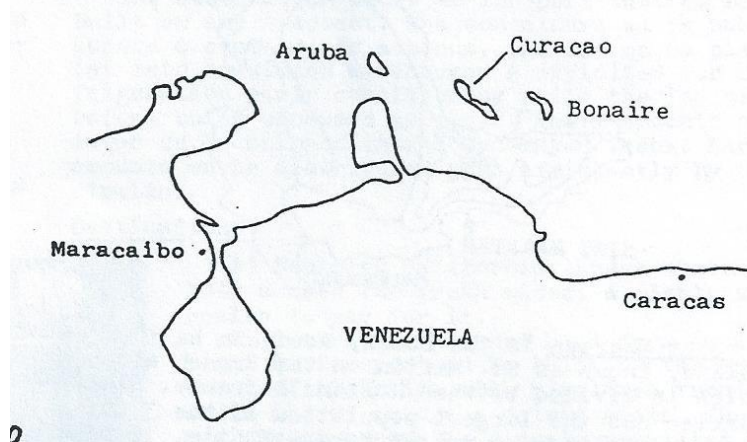
Sint Eustatius (Statia) is a quiet & forgotten backwater whose glory days lie in its past. Back in the time of the American Revolution, Statia's Oranjestad harbor was jammed with tall ships. But the British burned Oranjestad to the ground in 1780 & Statia has never recovered. Its population, which was once 20,000, has declined to about 1000 today. The island's 8 square miles consist of 2 volcanic mountains with a valley in between where most of the people live. Tourists on day-trips to Statia climb mountains to see wonderful views of nearby islands, shop in the few stores that make up Oranjestad's district, explore abandoned buildings & ruins, & snorkel off the island's 3 black sand beaches. But only the most ardent seekers of solitude are tempted to stay longer. However, several North Americans have purchased land & have started pioneer-type homesteads. There are no import duties or land taxes, & you can bring in just about anything without restrictions. Only a few people of Dutch descent remain on Statia. Most of today's population is black & English-speaking. To reach the outside world, there is a daily flight from Statia's local airport to & from nearby Sint Maarten. With its drastic decline in population, there is probably plenty of property available on Statia at much lower prices than on more popular islands. Anyone interested in tropical homesteading should seriously consider this island.

Bonaire is a 40 mile long boomerang of sand & coral & bright sunshine. With only a few 1000 people occupying its 112 square miles, Bonaire is one of the least densely populated Caribbean islands. A national park makes up 1/3 of the island, & salt flats occupy another large chunk. There are 1000s of pink flamingoes, & more goats than cars. The island's capital, Kralendijk, has 1000 residents, one disco, & 2 Chinese restaurants. Bonaire's main claim to fame is the sensational coral reef that encircles the island & attracts scuba divers from all over the world.



Sint Maarten, Saba, & Sint Eustatius, people also speak English. The native language spoken on the 3 Leeward islands, Aruba, Bonaire, & Curacao is Papiamentu, a creole language, probably based on a Portuguese “lingua franca” with English, Spanish, & Dutch influence. The word “Papiamentu” comes from the old Spanish word “papear” which is still used in Puerto Rico and means “talking.” But, since the ABC islands’ economies depend heavily on tourism, mainly from English-speaking N. America, a person could probably manage well enough speaking only English.

References: 1) Caribbean Hideaways - Ian Keown,
2) Pilot's Guide to the Lesser Antilles - Paul
Fillingham, 3) Utopia Is An Island - Norman D. Ford,
4) ISLANDS Magazine, Dec 88, P122 & p133



Couple Survives Ocean Ordeal, Thanks to Fresh Water Supply

Simone and William Butler drifted for 66 days in the Pacific, their only source of drinking water a seven-pound hand pump that converts saltwater to fresh water by forcing it through a reverse osmosis element manufactured by a Dow subsidiary.

For those who are lost at sea without fresh drinking water, the odds of survival are often slim. For Simone and William Butler, adrift on a raft in the vast Pacific, the chances were considerably better — primarily because the Survivor 35 water-maker was part of their gear.

This comparatively small, manual pump operates on the principle of reverse osmosis (RO) combined with energy recovery technology. Seawater, or brackish or polluted water, is forced through a thin film

composite membrane — a *Filmtec* brand reverse osmosis element manufactured by FilmTec Corporation, a subsidiary of The Dow Chemical Company. The Survivor 35 is manufactured by Recovery Engineering, Inc., in Minneapolis, Minnesota. The firm produces three other watermakers, the only hand-operated desalimators currently on the market, for use in situations where a fresh water supply is essential to survival.

The Butler's ordeal began last June when their 40-foot sail boat was rammed and sunk by whales in the middle of the night 1,200 miles off the coast of Costa Rica. In a wild dash to the relative safety of their rubber raft, they managed to grab only a little food, some fishing gear, and the Survivor 35, which is credited with keeping

the couple alive until their rescue by the Costa Rican Coast Guard 66 days later.

The Survivor 35 — which yielded a precious three liters of potable water for the Butlers each day of their 2-month ordeal — is just one application for reverse osmosis in the marine environment. According to Neil F. Hershfield, one of Dow's marketing managers for *Filmtec* products, RO technology is often used on offshore drilling platforms, on cruise ships, in resorts, and for other applications where seawater is the feed source.

There are also a variety of home, commercial, industrial, medical, and pharmaceutical applications for the technology, which was developed more than two decades ago. Hershfield said many single family homes, townhouses, condominiums, and apartments are now equipped with under-the-sink or countertop RO systems to purify tap water.

Commercially, reverse osmosis is put to use in campgrounds, car washes, greenhouses, hotels, and restaurants. It's also valuable in the manufacture of ice and it is often used in vending machines. RO is



reprinted from
COMMERCIAL DIALOGUE
Feb 1990

often used in the production of ultrapure water for use in the semiconductor industry and the power industry. Hemodialysis equipment frequently relies on RO, as do small systems in hospitals, clinics, and research and development laboratories.

In simplest terms, reverse osmosis (RO) — the finest level of filtration available — could be characterized as separating unwanted substances from those that are wanted. For example, the RO membrane acts as a barrier to dissolved salts, inorganic molecules, and larger organic molecules. Water molecules, on the other hand, pass freely through the membrane, resulting in a purified product stream.

How Does It Work?

Imagine a semipermeable membrane — a membrane that is permeable to some things, but not permeable to other things — placed between two compartments. For this example, assume the membrane is permeable to water, but not to salt. Then, place a salt solution in one compartment and pure water in the other compartment. The water can permeate the membrane from either side. However, the salt cannot pass through the membrane at all.

As a fundamental rule of nature, the system will try to reach equilibrium — it will try to reach the same concentration on both sides of the membrane. There is only one way it can do this: the water must pass from the pure compartment to the compartment containing the salt, and dilute the salt solution. This phenomenon — which occurs frequently in nature — is called osmosis.

To achieve reverse osmosis, a force is applied to reverse the direction of the water flow through the membrane. Instead of the pure water flowing into the salt solution as nature dictates, the salt solution is forced against the membrane. Since the membrane is not permeable to inorganic salts, only the water will pass through. Typically up to 99 percent of the dissolved salts are rejected in the passage through the RO membrane.

Cations effectively rejected by reverse osmosis include calcium, magnesium, sodium, potassium, barium, ferrous and ferric iron, manganese, strontium, and ammonium. Many anions, including carbonate, bicarbonate, fluoride, nitrate, chloride, sulfate, phosphate, and dissolved silica, are also successfully rejected with the process. So, too, are colloidal silica, pH, chloramine residual, turbidity, and chlorine residual.

Reverse osmosis membranes, like the *Filmtec* brand reverse osmosis element produced by FilmTec Corporation, a Dow subsidiary, can remove purified water from a feed stream, concentrate chemicals in the feed stream, and selectively separate small ions and molecules. The reverse osmosis process does not concentrate to 100 percent or separate to 100 percent.

RO technology, which has existed for more than 20 years, is being used in an increasing number of home, commercial, industrial, medical, marine, and pharmaceutical applications. According to Neil F. Hershfield, one of Dow's marketing managers for *Filmtec* products, the market is growing at more than 12 percent per year, with some segments experiencing growth in excess of 20 percent per year.





LOOKING FOR YOUR NEXT READ OR LISTEN?

1. **An Illusive Phantom of Hope: A Critique of Reformism** by Kyle Rearden (Audiobook/Anthology)
2. **The Production of Security** by Gustave de Molinari (Audiobook)
3. **Are Cops Constitutional?** by Roger Roots (Audiobook)
4. **Argumentation Ethics: An Anthology** by Hans-Herman Hoppe et al (Anthology)
5. **Just Below The Surface: A Guide to Security Culture** by Kyle Rearden (Audiobook/Paperback)
6. **Sedition, Subversion, and Sabotage, Field Manual No. 1: A Three Part Solution to the State** by Ben Stone (Paperback/Audiobook)
7. **#agora** by anonymous (Paperback/Audiobook)
8. **Vonu: A Strategy for Self-Liberation** by Shane Radliff (Paperback)
9. **Second Realm: Book on Strategy** by Smuggler and XYZ (Paperback/Audiobook)
10. **Vonu: The Search for Personal Freedom** by Rayo (Special Paperback Reprint/Audiobook)
11. **Vonu: The Search for Personal Freedom, Part 2 [Letters From Rayo]** (Paperback)
12. **Going Mobile** by Tom Marshall (Paperback/Audiobook)
13. **Anarchist to Abolitionist: A Bad Quaker's Journey** by Ben Stone
14. **Brushfire, A Thriller** by Matthew Wojtecki (Paperback/Audiobook)
15. **VonuLife, March 1973** by Rayo et al (Paperback – 11/2020)
16. **The Big Book of Secret Hiding Places** by Jack Luger (Paperback)
17. **Low Cost Living Notes** by Jim Stumm (Paperback/Kindle)
18. **Survival Gardening Notes** by Jim Stumm (Paperback/Kindle)
19. **I Must Speak Out II: The Best of The Voluntaryist** by Carl Watner (Paperback)

**DISCOUNTED BUNDLES & PRIVACY TOOLS AVAILABLE AT
LibertyUnderAttack.com!**

