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SPECIAL SECTION: FUTURE POLITICS

★ A VIRTUAL THIRD PARTY

★ DIGITAL MILITANT ISLAM

★ NEW START-UP NATIONS

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Start-Up Nations on the High Seas

Autonomous communities, floating in international waters, would allow political pioneers to test novel forms of government.

by Adam Piore

AS INCONGRUOUS AS IT MAY SOUND, A TRIP to Nevada's bone-dry Black Rock desert is what got Patri Friedman thinking about a political utopia in the middle of the ocean. Back in 2000 Friedman had just returned from Burning Man, the weeklong festival of radical free expression, where tech geeks build elaborate installations and free spirits dance naked in the sun. Friedman, then a 20-something dot-com entrepreneur, was still buzzing from the sight of thousands of people casting off the shackles of societal convention on the desolate terrain outside Reno, and started wondering if there might be a way to unleash stifled political activity in the same way. His first idea was a modest offshore floating festival to explore the options, and from that seed a grander vision grew.

Today Friedman is a leading proponent of the seasteading movement, an effort to create permanent floating communities in international waters that would allow "the next generation of pioneers to peacefully test new ideas of government," he says. Think of these as the political equivalent of business start-ups: self-created micronations where anyone could be president of his own domain, setting up his own political and economic rules. All it would take would be an ocean platform or large vessel, some capital investment, a vision, and a good dose of chutzpah. And settlers, of course. The laws of supply and demand would determine which of these micronations would attract settlers and survive.

Adam Piore is a contributing editor at DISCOVER.

"If you join a city and you don't like the way it's going, you can float away and join a different city," says Michael Keenan, former president of the Seasteading Institute.

"It's not about one person's vision of utopia, because most people's visions won't work in practice," Friedman explains. "The concept is to open a new frontier so that a bunch of people can go out and try a bunch of ideas."

Friedman and his collaborators have raised over \$2 million to help transform idea into action. Much of that money has come from Peter Thiel, a Silicon Valley venture capitalist who founded PayPal and bankrolled Facebook's early days; he is also a libertarian who believes in maximizing individual rights and

minimizing the role of the state. With Thiel's help, Friedman launched the Seasteading Institute, a research-oriented nonprofit, in 2008. Since then the group has published papers on switching between different forms of government, business models for offshore economies, international law, and the engineering challenges of building floating cities that could survive in the middle of the ocean.

MUCH OF THIS RESEARCH IS AIMED AT COUNTERING the seasteading movement's antecedents, which Friedman concedes were less than practical. "Somebody has some crazy notion, they start a mailing list, and then nothing ever happens," he says of previous



BOTH IMAGES: COURTESY BLUESEED

BREAKING NEWS FROM 2050 >>>> MEXICAN NATIONALS SLEEP IN FLOATING CITIES BY NIGHT, WORK TELEJOBS IN L.A. BY DAY ☉☉☉ ANARCHISTS BUILD

ocean colonization projects. "Nobody was businesslike, analyzed international law, or considered how you go, step by step," Friedman, who had studied computer science at Stanford University before signing on as programmer at Google, felt ideally suited to the task. He took inspiration from his grandfather, the economist Milton Friedman, one of the 20th century's strongest proponents of free-market systems and limited government intervention.

Much like the elder Friedman's economics, seasteading takes a Darwinian approach.

In a paper titled "Governing Seasteads: An Outline of the Options," published on the Seasteading Institute's website, research associate Brad Taylor argues that "attempting to anticipate concrete rules is pointless and against the spirit of seasteading, since we will only learn what works through trial and error." Friedman imagines a fleet of floating nations embracing forms of government that range widely, from anarchic to majority-rule democratic to outright dictatorship. The only crucial requirement is freedom of movement. A would-be

dictator would be constrained, then, by the threat of departure by his or her subjects.

Making all this happen for real will require inspiring many dreamers to head to the seas to try out their visions. Last year two members of the Seasteading Institute took the first step, founding a for-profit start-up called Blueseed. The company wants to anchor a 1,000-person cruise ship in international waters 24 miles off California, where it will serve as a commercial hub for skilled immigrants and foreign entrepreneurs who don't have long-term U.S. visas. The foreign occupants could use easy-to-get tourist or short-term business visas to take quick jaunts to the mainland for meetings with investors or supervisors in Silicon Valley.

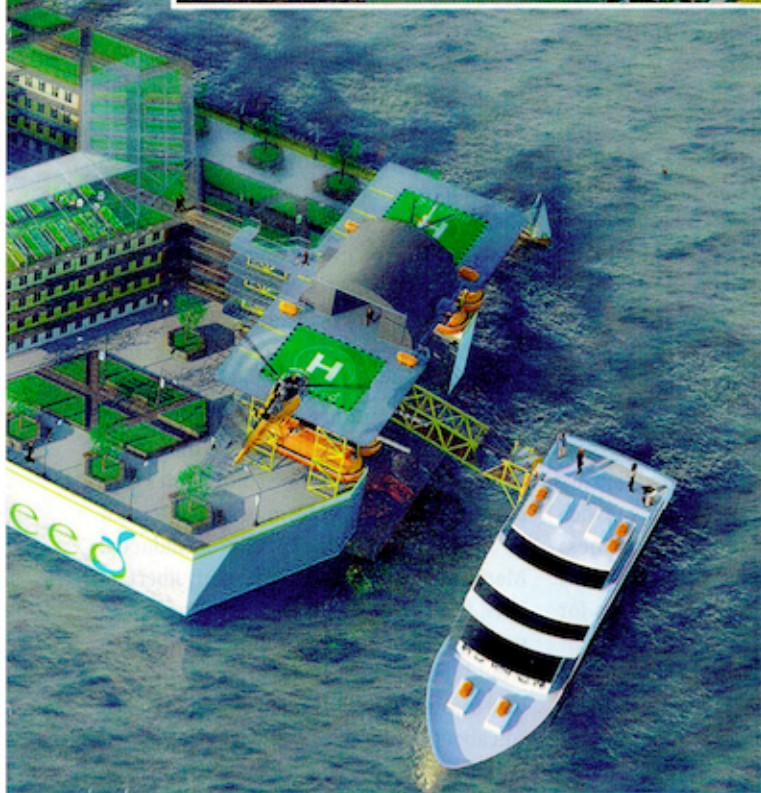
ALTHOUGH BLUESEED LACKS A POLITICAL component, seasteaders hope it will pave the way for more civic-minded experiments by showing that viable economies can be built offshore. It may also serve as a legal test case. Invoking the United Nations' 1982 Convention on the Law of the Sea, Friedman notes that the first 12 miles offshore constitute a territorial contiguous zone that is bound by the same laws as those prevailing on land. The next 12 miles are subject to national laws involving smuggling, immigration, taxation, and sanitation. And every coastal nation has exclusive economic rights in the zone extending 200 miles off its shores, meaning that all the gas, oil, fish, and other resources are under its control. Blueseed reasons that it need set anchor only 24 miles offshore to evade U.S. immigration law. Seasteaders who want to be entirely independent will have to anchor beyond the 200-mile zone.

"Blueseed certainly won't be doing anything illegal," Keenan says, "but it's going to be an open question how the U.S. reacts." To advance his agenda, Friedman last year launched Future Cities, a project aimed at studying the practical impact of nontraditional rules and legal systems. He is currently in discussions with the government of Honduras to operate a new city within an autonomous economic zone the country created when it amended its constitution last summer. The zone's appointed governor and international oversight board will have broad powers to set their own business regulations and establish an



LEFT A concept vessel from Blueseed would enable residents to live, work, eat, and play two dozen miles off the U.S. coast.

ABOVE An imagined scene of daily life aboard a Blueseed community.



HOMELAND NEAR COAST OF RIO DE JANEIRO >>>> PIRATES ATTACK LIBERTARIAN SEASTEAD OFF PHILIPPINES; MILITIA REPELS THEM EASILY



independent judiciary and police commission.

An island nation is nothing without its island, and the task of creating one has fallen to the Seasteading Institute's director of engineering, George Petrie, an expert in offshore engineering and retired professor of naval architecture at the Webb Institute in Glen Cove, New York. In their initial incarnation, seasteading communities would probably rely on existing technologies, Petrie expects. Seasteaders could, for instance, buy a used oil rig that can operate in 3,000- to 6,000-foot-deep water for about \$100 million. "You could put everything you need on there, you could put solar panels, wind generators, and you could even put an open platform and still have 30,000 square

Friedman imagines a fleet of floating nations trying forms of government, from monarchy to anarchy to majority-rule.

feet or more of enclosed space," Petrie says. A used cruise ship might cost tens of millions of dollars. The most cost-effective option would be a scaled-up barge: At about 1,000 feet in length, this type of vessel would run perhaps \$350 per square foot, though the rocking and rolling from waves might make for a rough life aboard.

Petrie envisions a number of growth scenarios for offshore communities. Some may spring up the same way pioneer towns evolved on the American prairie, with individual families setting up in an area blessed with good natural resources. Perhaps algae farmers would cluster in a particularly rich patch of ocean. Then, just like on the prairie of old, these clusters might eventually draw enterprising businesspeople willing to open small shops in floating structures of their own, forming a nucleus resembling a village square. Other seasteading settlers might band together from the beginning and contribute to the establishment of a "mother ship," a floating

hub with shops, supplies, and infrastructure.

Petrie's long-term engineering goal is to develop floating residential modules that could be replicated and connected "like Lego blocks" as the population grows. What these modules will look like—whether they will be connected by water taxis, gangways, or giant hinges, for instance—remains an open question. "If the business model is working, people are going to want to live there, and technology will find a way to attach them," Petrie says.

IN A 50-PAGE STUDY FIRST RELEASED IN 2011, the Seasteading Institute rated the ocean's most promising locations and focused on two development scenarios. The first, small communities, called shipsteads, would house between 100 and 1,000 people devoted to a single enterprise, much like the model being demonstrated by Blueseed. There is no prescription for who would shoulder the costs; each shipstead would have its own charter. But since the early ones would most likely be economic enterprises, investors or business owners would probably pay for their construction. The second type of community, representing the Institute's long-term vision, would be a "full-fledged city on the ocean" with 50,000 residents or more.

The study's authors found that the most promising locations for the early shipsteads would be within the 200-mile exclusive economic zones of highly developed nations in North America, Western Europe, Australia, and East Asia. These communities would be connected to the mainland by high-speed ferries. They could benefit from access to land-based data links and underwater cables, as well as the nearby markets of high-GDP nations.

The Seasteading Institute study also ranked locations based on average wind speeds, air temperatures, and the possibility of pirate attacks. When evaluating shipstead locations, the authors gave twice as much weight to economic and business considerations as they did to the physical environment. They reversed that ratio for the more self-sufficient floating cities, or "metropolsteads," concluding that the ideal sites for these would be along the western coasts of Central and South America, off

the Brazilian coast, and in the South Pacific.

One of the top threats to any free-floating community is ocean waves. Oil rigs are usually evacuated during major storms, and the devices used to stabilize cruise ships in churning seas can usually tame no more than moderate swells. Even in areas with generally calm seas, waves can sometimes rise two stories high; in stormier areas, they can match the height of a five-story building, Petrie says.

A plausible solution is the floating breakwater, a circular beach that would protect the metropolis nestled inside. The leading models, designed by the Dutch Engineering firm FDN Group, range from simple chains of floating tanks to a full barrier that dampens the effects of oncoming swells. So far, the largest breakwater built by FDN is a 1,150-foot-long parking garage, located a few hundred feet off the coast of Monaco, connected to the mainland by a causeway and capable of blocking 22-foot waves. The cost: 80 million euros (about \$100 million). "I wouldn't say building a breakwater in the middle of the ocean is impossible," says Dil Tirimanna, an FDN Group managing director. "It would be extremely expensive, but it could be done."

Inevitably, a proposal as wildly utopian as seasteading has its naysayers. "To me the question is not whether it's feasible, but whether it's wise," says Vishaan Chakrabarti, director of the Center for Urban Real Estate at Columbia University. "We already have a situation where wealthy people live in huge McMansions with any number of cars and a whole number of resources. If we are going to save our planet, we need to live together. We are not going to do that by going off and living on man-made islands."

Pragmatic worries have followed the movement as well. How might a community of libertarians opposed to taxes and an organized military defend itself against attacks from pirates? The Seasteading Institute's Keenan is unconcerned. He notes that pirates today are a problem only off the coast of Somalia and in the Straits of Malacca. More generally, he notes that many libertarians, the group especially interested in the concept, tend to be pro-gun. Any pirates would most likely have to grapple with sizable seasteader militias, getting a potent lesson about new politics in the process. **D**