To: The World

From: The Hydrogen Expedition HQ Date: January, 2005

Subject: Prospectus

The Hydrogen Expedition

Get ready to change everything...

The Hydrogen Expedition

Prospectus-

Our Vision

The Hydrogen Expedition will be the first circumnavigation of the globe in a hydrogen fuel cell powered boat. The unique hydrogen powered boat that will be used for the circumnavigation will be single-handedly piloted, and, at just under 24 ft, will also be the smallest powerboat to complete an around-the-world voyage. The record setting adventure will be an international event, and once complete, it will be the most impressive demonstration ever of the capabilites of a hydrogen fuel cell.

As the organizers of this momentous undertaking, we hope to use *The Hydrogen Expedition* as a vehicle to publicize the advantages of hydrogen fuel cells.

We intend to influence the industrial and political powers of our world in order to expedite the development of a "hydrogen economy."



Top: *The Hydrogen Expedition* will influentially demonstrate the capabilities of fuel cells (such as the one pictured above), and will help publicize the advantages of hydrogen.



Our boat will resemble the modern rescue boat pictured above in design and appearance.

History



Joseph F. Sahid, boatman and alternative energy advocate, envisioned the expedition. The Hydrogen Expedition is the brainchild of Joseph F. Sahid, an eighteen year old from New York City. A lifelong boatman and a passionate advocate of alternative energy, Mr. Sahid first envisioned the expedition in 2003, while a senior at Phillips Exeter Academy.

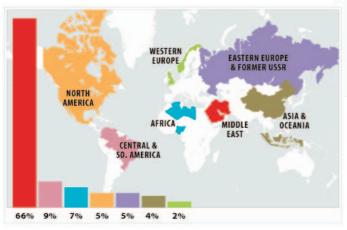
During the summer of 2004 Mr. Sahid opened an office in New York City from where he worked with a small group of assistants to organize the expedition. Now, a freshman at the University of Pennsylvania, he has recruited a group of fellow undergraduates to his team, and he is working with them to make *The Hydrogen Expedition* a reality.

Currently, *The Hydrogen Expedition* team consists of a diverse and talented group of individuals from six different countries and from across the United States.

So far, several publications, including *The Boston Globe* and the *Daily Pennsylvanian*, have run articles about *The Hydrogen Expedition*.

The Looming Energy Crisis

The world runs on oil. We all rely on a steady supply of it to heat our homes, drive our cars, and maintain power flowing through the electric grid. The use of this polluting fossil fuel is having severely destructive effects on our enviornment. Equally disturbing, the global supply of oil is rapidly being depleted. In fact, most experts predict that the inevitable peak in global oil production, the point at which half of the ultimately recoverable oil will have been extracted, will occur in the next 10 to 20 years. To make matters worse, the oil production in most countries should peak well before those in the Middle East, leaving, within the next few years, nearly all of the world's energy sources in the politically unstable region around the Persian Gulf.



Oil resources are highly concentrated in the Middle East.



Fuel cells can improve air quality, dramatically reduce greenhouse gas emissions, and will help ensure America's energy independence.

This centralization of the control over the lifeblood of society will undoubtedly reuslt in dangerous increases in the price of oil.

As is noted by Wharton professor and author of *The Hydrogen Economy*, Jeremy Rifkin, "In desperation, the United States and other nations could turn to dirtier fossil-fuels — coal, tar sand and heavy oil. But that would only worsen global warming — and imperil the earth's already beleaguered ecosystems." Luckily, an alternative exists: Hydrogen.

Hydrogen fuel cells have been used in the space program for decades. and in US Navy submarines since the 1980s.

Hydrogen is the most basic, abundant and ubiquitous element in our universe, making up about 93% of all atoms. An innovative device called a "fuel cell" can convert hydrogen into a steady stream of energy, releasing only water and heat as byproducts. Hydrogen fuel cells are much more reliable than internal combustion engines, and they operate virtually silently. These marvels of modern technology can extract and apply energy from hydrogen more efficiently than any internal combustion engine can from fossil fuels. With all of this in mind, most experts expect hydrogen fuel cells to revolutionize the way the world is powered.

The envisioned economy of the future has been dubbed "The Hydrogen Economy." It will appear and operate very differently from what is in place today. Wind farms, solar panels, and hydroelectric damns will provide a virtually never-ending stream of energy that will be used to electrolyze (split) water into hydrogen and oxygen. The hydrogen will be used to power transportation, along with being used to feed fuel cells in businesses and homes. Thus, rather than receiving power through power lines from fossilfuel burning plants far away, most people will be able to produce their own clean energy efficiently and cheaply. They will be able to sell off the extra energy that their fuel cells produce on a decentralized electric grid. The air will be cleaner and the streets will be quieter. Also, in eliminating the industrialized world's dependence on Middle Eastern oil, hydrogen fuel cells will help promote global political stability.



Models

While The Hydrogen Expedition is a unique project, we look to global adventures of the recent past as models for our voyage. Like the highly-publisized attempts to circumnavigate the world in a hot-air baloon that took place during the past decade, The Hydrogen Expedition will capture the public interest and be at the center of an international media phenomenon.

The Hydrogen Expedition will attract even more attention than these past projects, since it will be planned and executed completely by college-age students. Our passion will inspire people from around the world and from all walks of life. The Hydrogen Expedition will be a compelling story that will be praised and discussed for years to come.

In the 1990s
numerous highlypublicized
attempts were
made to
circumnavigate
the world in a
hot-air balloon.
These events are
indicators of
thesort of
publicity that
The Hydrogen
Expedition will
garner.



The Plan

Our seven step plan takes us from inception to expedition.



The Hydrogen Expedition will help focus national attention and discussion on alternative energy.

- 1. Partner with the University of Pennsylvania (or another appropriate organization with 501(c)(3) non-profit status) so that we can offer sponsors tax deductions for their gifts
- 2. Complete a detailed feasibility study to determine the design of the boat that will be used for the expedition, the cost of the expedition, etc.
- 3. Collect endorsements from prominent politicians, environmental groups, scientists, etc.
- 4. Generate media attention to help attract sponsors
- 5. Secure the funds and equipment needed to make the circumnavigation a success from companies, individuals, governmental agencies, etc.
- 6. Build the boat and complete the detailed planning of the circumnavigation
- 7. **Execute the circumnavigation** and use the media attention that it generates (newspaper articles, TV news spots, documentary films, etc.) and our website (<u>www.thehydrogenexpedition.com</u>) to publicize hydrogen fuel cells.

The Hydrogen Expedition
will be the critical next
step for hydrogen fuel
cells.

Why Are We Confident?

Our confidence stems from our youthful enthusiasm and our dedication to bringing hydrogen to the forefront of economic and political debate.

The Hydrogen Expedition is based on a number of state-of-theart technologies, which, brought together and combined with the sheer willpower of motivated college students, will bring positive change to society. We expect that the media will be excited by the daring nature of the expedition and by its political and societal implications. The fact that the expedition is being organized entirely by college students will garner large amounts of publicity. The world will take note as the next generation defines its place in history. We are confident that potential sponsors will be interested in benefiting from the media attention the expedition will generate and in advancing the issues the expedition stands for. Therefore, we trust that we will be able to acquire the funding and equipment needed to make the expedition a success.

We are a committed group of Ivy League students with a goal that serves to benefit all who are involved in the project. *The Hydrogen Expedition* is a win-win for sponsors, participants, the media, and society as a whole.



The Hydrogen Expedition
www.thehydrogenexpedition.com