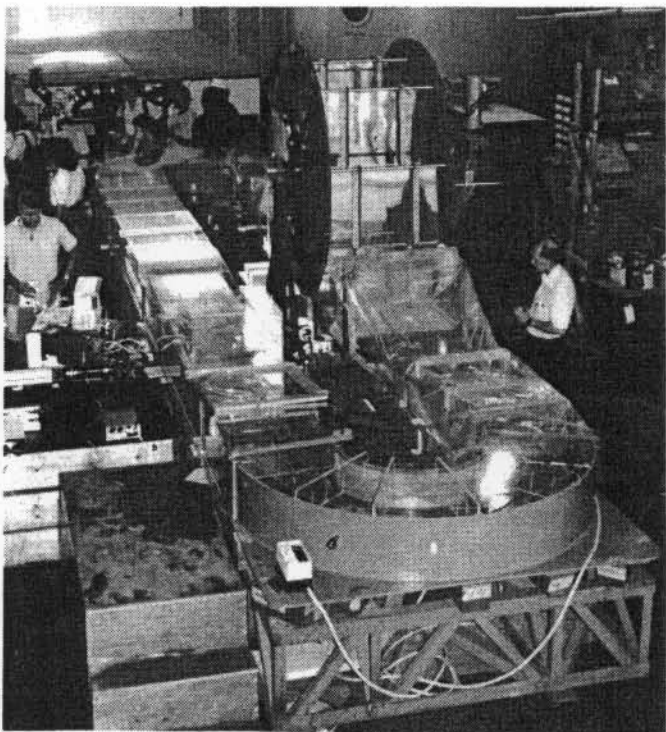




NEWSLETTER

August 1988

WOODS HOLE OCEANOGRAPHIC INSTITUTION



The paddle-wheel flume, one of two flumes celebrated at the dedication ceremony. (Photo by Rob Brown.)

FLUMES DEDICATED AT WHO'S COASTAL RESEARCH CENTER

Two experimental flumes were dedicated to the memory of Dr. William D. Grant, Senior Scientist in the Ocean Engineering Department, on July 18 at the Coastal Research Center. The two flumes are housed in the Coastal Research Lab and have been in operation for about a year.

The larger flume (17 m) was conceived of by Dr. Grant to perform basic research on fluid flow-sediment interactions, including the effects of animals living on and within the sediments. The flume, which he designed with Ken Doherty of Ocean Engineering, consists of a 17-m long steady flow section whose mean velocity is controlled by tilting the flume base on its supports. The flume is complemented by some recent additions, including a Laser Doppler Velocimeter (LDV), built by Yogi Agrawal (formerly of Ocean Engineering), which

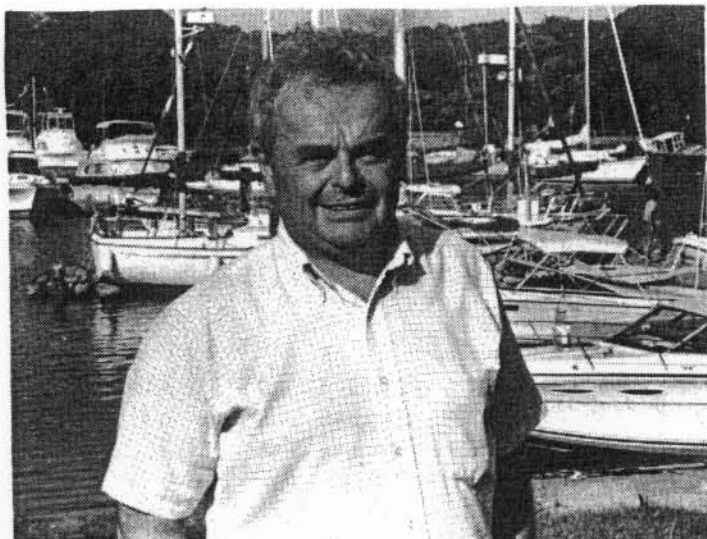
CUSTOMS SERVICE RELEASES ATLANTIS II

The A-II was released on July 25 after being held in "constructive seizure" for over two months by the U.S. Customs Service. A letter to Institution Director John Steele from the U.S. Treasury Department, the Cabinet branch with authority over Customs, declared WHOI "an innocent party" in the May 18 incident in which a small amount of marijuana was found in the personal possessions of a crew member aboard ATLANTIS II. Consequently, the Treasury, following an investigation and a petition submitted by WHOI, has dropped forfeiture proceedings against the vessel. The letter from the Treasury Department concludes that the Institution had taken "reasonable precautions" to avoid drug abuse aboard ship and had "no knowledge of the controlled substance on board."

The vessel has been pursuing scheduled research under the "constructive seizure" status since being allowed to leave San Diego on May 31. At present it is working along the Juan de Fuca Ridge studying earthquake activity and hydrothermal output at ocean floor spreading centers.

allows precise and rapid estimation of the dynamic qualities that control and respond to sediment motion and changes in bottom conditions (such as those brought about by biological activity). The flume also features a cooling system for water circulation, which allows experiments to be conducted on local fauna that require cool water for part of their life cycle. This flume is unique in the country for its mix of precise flow control, boundary-layer measurement tools, and design for animal/sediment interactions over a broad range of velocities.

The second flume is an 8-m paddle-wheel flume, which was built in the laboratories of Drs. Donald Rhoads and Larry Boyer at Yale University and donated to the Center in 1986. This racetrack flume is used for lower velocity flows and for organisms and sediments that cannot withstand the stress of recirculation through pumps. The paddle-
(See **FLUMES** on next page)



Fred Golden, Interim Editor for *Oceanus Magazine*.
(Photo by Rob Brown.)

INTERIM EDITOR APPOINTED FOR *OCEANUS* MAGAZINE

Frederic Golden, a professional writer and editor for many years, has been appointed Interim Editor for *Oceanus Magazine* while Paul Ryan is in Japan on a Fulbright Fellowship. Paul, who has been with *Oceanus* for 12 years, will spend September through May in the orient studying Japan-U.S. marine interests.

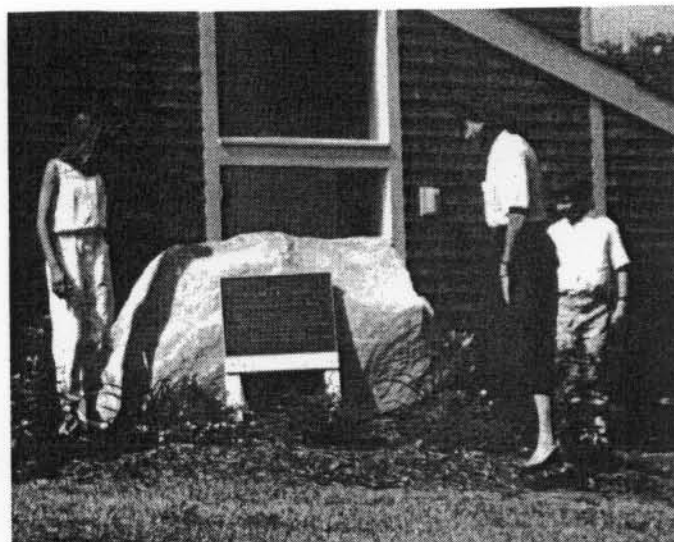
Mr. Golden has covered some of the major science stories of this century. He holds an M.S. in Journalism from Columbia University and a B.A. in Economics (with minors in History and English and "enough science credits to fulfill pre-med requirements") from New York University. He initially planned to go into medicine but, following a stint with the campus newspaper, decided "being a journalist would be a lot more fun."

During the 1960's, Fred worked for the AP Foreign Desk putting together the daily Vietnam Report. In 1967, he was hired as a writer by *Time Magazine*, and for the next 17 years he was variously responsible for *Time's* Environment, Science, Medicine, and Space sections. Fred was formally appointed Science Writer for *Time* the week of the moon landing in 1969. "I always like to say that the writer before me got the astronauts to the moon, and I got them back," he quips. During his years with *Time*, Fred wrote stories on the moon landings, the first test-tube baby, the first shuttle flights, the Einstein Centennial, and other major events. He notes, as a point of interest, that *Time* issues with cover stories on science generally outsold other issues.

In 1984 Fred left *Time* to become Assistant Managing Editor of *Discover*, *Time Inc.'s* science magazine. There he covered, among other stories, the restoration of the Statue of Liberty, the American Star Wars initiative, and *Discover's* 1986 Scientist of the Year, Bob Ballard. After three years at *Discover*, Fred moved to the west coast where he became Business and Science Editor for the *San Francisco Examiner*. Today he is a freelance writer and editor, the author of four books, and the recipient of numerous writing awards. An avid boat-lover, he is spending the summer in Woods Hole as an MBL Science Writing Fellow.

Fred will work on upcoming issues of *Oceanus* focusing on whales, problems of ports (especially in relation to sea-level rise), and ALVIN's 25th Anniversary. He will also be involved with planning at least one future issue of the magazine.

FLUMES (continued from page 1)



Mrs. Lynn Grant and the Grant children, Kira and Denny, unveil the stone and plaque that will serve as a memorial to Dr. Grant's work. (Photo by Rob Brown.)

wheel flume was installed at Woods Hole under the joint supervision of Drs. Cheryl Ann Butman and Larry Boyer.

Since the flumes were constructed, they have been used by investigators in different fields and have spawned numerous multidisciplinary articles. The Coastal Research Center and the Institution are grateful to Dr. Bill Grant for his vision and efforts in developing the flumes. Persons wishing to use the flumes should contact Dr. David Aubrey, Director of the Coastal Research Center.

CAN JELLYFISH PROVIDE NEW TOOL FOR CANCER RESEARCH?

Doug Prasher's fascination with bioluminescent jellyfish has led him into research that may prove important to the study of cancer, AIDS, and other diseases. An Assistant Scientist, Doug is part of WHOI's new effort to expand the Institution's involvement in adapting marine systems to problems in cell biology and other areas. WHOI has committed \$100,000 a year for each of the next five years as part of its biotechnology initiative.

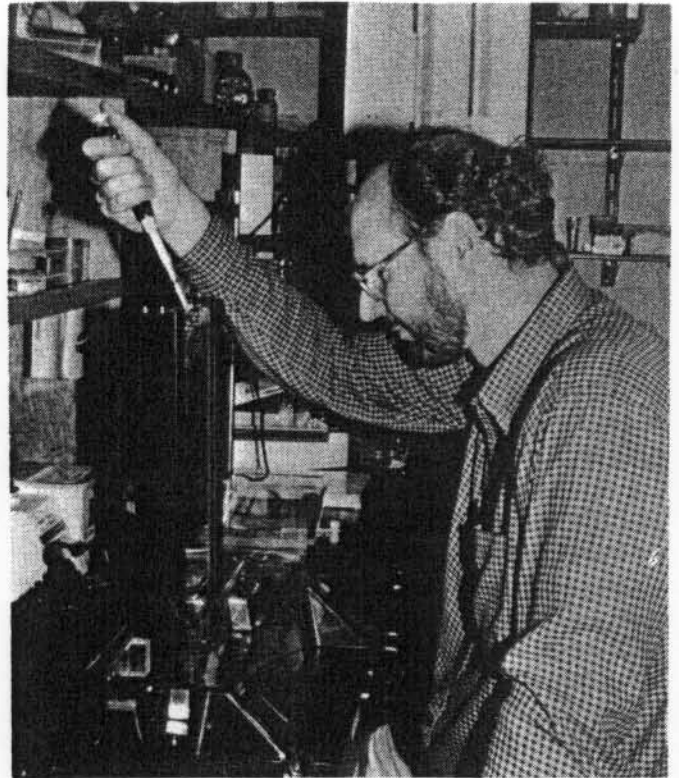
Doug joined the Institution last September. As a biochemist who specializes in gene manipulation, he brings molecular techniques to oceanography at WHOI. His general research involves collecting information on marine bioluminescent systems in salinerates.

Doug was recently awarded a \$180,000 grant from the American Cancer Society to study the *aequorea* jellyfish, a salinerate whose genes produce a green fluorescent protein (GFP) that causes it to glow when disturbed. This GFP is similar to the protein in fireflies that causes them to flash.

Doug hopes to use this gene as a tracer or tag that could be grafted onto the DNA of human cells associated with various diseases so that the progress of the disease can be studied by following the glowing green trail left by the GFP as the cell replicates. If his research is successful, *aequorea* GFP could become widely used as a tracer in cell biology. The GFP does not affect the behavior or survival of the organism it is spliced onto, and it is easily detected and very small. For these and other reasons, it could conceivably replace some of the tracers used in cell biology research today.

Aequorea are common in the Pacific Northwest, especially in parts of Puget Sound and around the San Juan Islands. Doug periodically collects the jellyfish there, usually working with the University of Washington Marine Biology Station. Last time Doug visited the west coast he collected about 100,000 individuals. The jellyfish are generally gathered at night using a collecting net off a dock or from shore. Following capture, they are processed by removing the luminous outer ring, distilling the ring down into a green liquid, and freezing it.

Doug still has many questions about exactly how GFP works in the genes of the jellyfish and what place bioluminescence plays in the life of the organism. His recent grant from the American Cancer Society provides funding for two years of study, but he believes it may take several years to fully understand how the GFP forms and what stimulates it to emanate its characteristic glow.



Doug Prasher at work in his lab in Redfield. (Photo by Rob Brown.)

THE WHOI BIOTECHNOLOGY INITIATIVE

A major, multifaceted initiative is now underway at WHOI in the area of molecular biological oceanography. Within the next few years, the Biology Department hopes to recruit new scientists and retrain some current staff members to participate in this exciting area. Some types of research to be pursued in the new initiative include the study of speciation by identification of intra-genic species-specific DNA sequences in fish, systematics of marine cyano- and nitrogen-fixing bacteria, physiological ecology of dinoflagellates, development of probes for marine protozoa, speciation in benthic communities, and transformation in fish caused by pollutants.

The purchase of new equipment will be integral to these studies, and while leaders of the project are pleased with support promised by the Institution over the next five years, they acknowledge the need for additional funding from private sources. The Institution is optimistic that a proposal submitted jointly by WHOI and MBL will be funded to help provide equipment for molecular biologists at both facilities.

DACEY, STOECKER, AND SCHMITT AWARDED TENURE

John Dacey, Associate Scientist in the Biology Department, has been awarded tenure after nine years with the Institution. He came to WHOI as a Postdoctoral Scholar in 1979, after earning a B.S. in Biology and Chemistry from Dalhousie University and a Ph.D. in Zoology from Michigan State. He became Assistant Scientist in 1980 and Associate Scientist in 1984. John's research interests include plant physiological ecology, biophysical ecology, and biogeochemistry, and he is author or co-author of 23 scientific publications.

Associate Scientist Diane Stoecker of Biology has also been awarded tenure. Diane came to the Institution in 1979 as a Postdoctoral Scholar after earning a B.S. in Botany from the University of New Hampshire, an M.S. in Microbiology from the University of Hawaii, and a Ph.D. in Ecology and Evolution from State University of New York at Stony Brook. Diane was promoted to Assistant Scientist in 1980 and to Associate Scientist in 1984. Her research focuses on microzooplankton ecology, and she is the author or co-author of over a dozen scientific publications.

Raymond Schmitt, Associate Scientist in Physical Oceanography, was awarded tenure in May. Ray, who holds a B.S. in Physics from Carnegie-Mellon University and a Ph.D. in Oceanography from the University of Rhode Island, came to the Institution in 1978 as a Postdoctoral Fellow. He became Assistant Scientist in 1980 and Associate Scientist in 1984. His research interests include oceanic fine and micro-structure, double-diffusive convection, and thermohaline ocean circulation. He is the author or co-author of 20 scientific publications.

GLENN JONES PROMOTED TO ASSOCIATE SCIENTIST

Glenn Jones of the Geology and Geophysics Department has been promoted from Assistant Scientist to Associate Scientist. The 33-year-old geologist, whose research interests include sedimentology, tandem accelerator mass spectrometry, and paleoceanography, first came to the Institution in 1983 as a Postdoctoral Scholar and became an Assistant Scientist in 1984. He earned his B.A. in Geology from the University of Rhode Island and his M.S. and Ph.D. Degrees in Marine Geology from Columbia University. Glenn is the author or co-author of eleven scientific publications.

PERSONNEL CHANGES

Peggy Chandler (Directorate) from Staff Assistant II to Staff Assistant III.

John Dacey (Biology) from Associate Scientist without tenure to Associate Scientist with tenure.

Armine Gulesserian (Chemistry) from Laboratory Assistant II to Research Assistant I-Chemistry.

Timothy Hawley (*Oceanus* Magazine) from Editorial Assistant to Assistant Editor.

J. Patrick Hickey (ALVIN Operations) from Research Assistant II-Mechanics to DSV Pilot.

Glenn Jones (Geology & Geophysics) from Assistant Scientist to Associate Scientist.

Robert Joyce (Services) from Facilities Service Assistant to Shipping and Receiving Clerk.

Shari Marscheider (Geology & Geophysics) from Part-time Helper to Laboratory Assistant I-Data Processing.

Edward Mellinger (Ocean Engineering) from Research Associate to Research Specialist.

Pamela Ruchser (Purchasing) from Staff Assistant I to Purchasing Expeditor.

Raymond Schmitt (Physical Oceanography) from Associate Scientist without tenure to Associate Scientist with tenure.

Diane Stoecker (Biology) from Associate Scientist without tenure to Associate Scientist with tenure.

Thomas Tengdin (ALVIN Operations) from Research Assistant I-Computer Communication System to DSV Pilot.

ADVISORY COMMITTEE SEEKS EMPLOYEE PARTICIPATION

The Advisory Committee, composed of scientific and technical staff members, invites constructive comments from all WHOI employees regarding the search for a new director. Committee members, their offices, and extensions are listed below.

James Luyten	Clark 303A	x2541
Judith McDowell	CRL 213	x2557
G. Michael Purdy	Clark 248	x2826
Barrie Walden	Smith 301	x2407
Jean Whelan	Fye 107C	x2819
Dana Yoerger	Blake 203	x260
Oliver Zafiriou	Redfield 3-24	x23

NEW FACES



Gail Caldeira
Staff Assistant II
Ocean Engineering
Clark 167, x2883
W. Little, Jr.



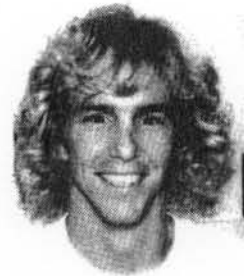
Elise Ralph
J. P. Student
Physical Oceanography
Clark 358B, x2533
R. Schmitt



Peter Schwamb
Carpenter
Facilities
Smith S-120, x2211
Phares



Peter Cvitan
Res. Asst. II-Comp. Ops.
Ocean Engineering
Clark 151, x2878
B. Cole



Griffith Raymond
Ocean Engineer
Ocean Engineering
Smith 301, x2579
B. Walden



Timothy Stanton
Associate Scientist
Ocean Engineering
Bigelow 201, x2757
A. Williams, 3rd

NEW ARRIVALS FOR WHOI FAMILIES

A son was born to Peter Clay, Research Associate in Ocean Engineering, and his wife Janet on June 29. Timothy Reed Clay weighed 7 lb 8 oz when he arrived at Plymouth's Jordan Hospital. He was welcomed home by his brother Daniel, who is four years old.

Nancy Copley, Research Assistant in the Biology Department, and Raymond Schmitt, Associate Scientist in Physical Oceanography, had twins on July 6 at Jordan Hospital in Plymouth. The two healthy boys, Eric Collier (6 lb 10 oz) and Stephen Winslow (5 lb 4 oz), were welcomed home by their brother Daniel, who is nearly four years old.

Galen Alexander Cook, first son of Jack Cook, WHOI Graphics Technician, and his wife, Kim Phillips-Cook, was born July 12 at Brigham and Women's Hospital in Boston. Galen weighed 7 lb 3 oz at birth.

Nan Weiss, Senior Development Officer, and her husband, Jack, recently had their first child at Cape Cod Hospital in Hyannis. Carly Elizabeth Weiss was born on July 30. She weighed 8 lb 3 oz.

WHOI RECEIVES GRANTS FROM DEVONSHIRE ASSOCIATES AND R. K. MELLON FAMILY AND WEBSTER FOUNDATIONS

A two-year grant of \$55,600 has been awarded by the Devonshire Associates of Boston to support one postdoctoral fellow at WHOI each year for the next two years. The fellows, to be named Devonshire Postdoctoral Fellows, will be supported by \$25,000 the first year and \$30,600 the second year of the grant. During the past two years, Devonshire Associates funded two fellows, Drs. John Bullister and James Moffett.

The Institution was recently awarded two grants--\$50,000 from the R. K. Mellon Family Foundation of Pittsburgh and \$10,000 from the Edwin S. Webster Foundation of Boston--which will both be allocated to the endowment for the Joint Initiative Awards. The Awards, which would not be possible without generous funding from foundations like these, are granted for a period of two to three years and allow scientists to develop their ideas and projects to the point where they can obtain more traditional support on their own proven merits. The Joint Initiative Awards enable scientists from different research disciplines to collaborate and focus on a common research problem.

SUMMER STUDENT FELLOWSHIPS AWARDED

This year the Institution announces two new fellowships. The first is an endowed fellowship provided by Joint Program alumni in Ocean Engineering and Geology & Geophysics. The O.E./G&G Alumni Fellowship effort was spearheaded by Susan (OE) and Chris (G&G) Tapscott, both WHOI alumni. The second new fellowship, the Christopher Haebler Frantz Fellowship, was donated by the family of the late Christopher Frantz. Frantz was 22 years old when he and two friends died in a helicopter crash on May 23, 1986 in Rhode Island Sound. After searches by the U.S. Coast Guard and Navy and Civil Air Patrols of four states failed to locate the helicopter, WHOI was approached for assistance. After a 32-day search, Richard Edwards of the Marine Department, working with the Horizon Marine Company, located the helicopter twelve miles offshore from Martha's Vineyard. In appreciation, Mrs. Haebler Frantz donated the Summer Student Fellowship in her son's name.

Below is a table listing information on this year's Summer Student Fellows.

<u>FELLOW and MAJOR</u>	<u>UNIVERSITY/COLLEGE</u>	<u>FELLOWSHIP</u>	<u>DONOR</u>
Battisti, Thomas (Mechanical Engineering)	University of Massachusetts, Amherst	Dr. William Richardson	Alden Products, Inc.
Clendennen, Stephanie (Marine Biology)	University of North Carolina	Research Experience for Undergraduates	National Science Foundation
Earles, Jennifer (Mathematics)	St. Cloud University	C. Russell Feldman	C. Russell Feldman Foundation
Eliezer, David (Computer Science)	University of Michigan Ann Arbor College	Sydney T. Knott, Jr.	Alden Electronics & Impulse Recording & Equipment Co.
Gallagher, Edith (Physical Oceanography)	Florida Institute of Technology	Richard Vanstone	Gratia R. Montgomery
Gille, Sarah (Physics)	Yale University	Noel B. McLean	Edo Corporation/ Mrs. Noel B. McLean
Hays, Graeme (Oceanography)	University of Southampton	WHOI	Institution Education Program
Huang, Stephen (Biology)	Yale University	Christopher H. Frantz	Mrs. Haebler Frantz
Hurysz, Brian (Elec. Engineering/Physics)	State University of New York, Plattsburgh	Dr. William D. Grant	Friends and Family
Johnson, Andrew (Chemistry)	Pomona College	Arthur Vining Davis	Arthur Vining Davis Foundations
Kelley, Joan (Mathematics)	Beloit College	Arthur Vining Davis	Arthur Vining Davis Foundations
Kirch, Susan (Biochemistry)	Mt. Holyoke College	WHOI	Institution Education Program
Kuechler, Kevin (Civil Engineering)	Princeton University	O.E./G&G Alumni	Joint Program O.E./G&G Alumni
Lambert, Monique (Chemical Engineering)	University of Illinois	Lawrason Riggs	Friends and Family
MacWhorter, Marjorie (Physics)	Middlebury College	Arthur Vining Davis	Arthur Vining Davis Foundations
McKibben, Jessica (Biology)	Williams College	Arthur Vining Davis	Arthur Vining Davis Foundations
Nadakavukaren, Maria (Geology)	Wellesley College	Arthur Vining Davis	Arthur Vining Davis Foundations
Njeru, James (Physics/Elec. Engineering)	Lafayette College	Arthur Vining Davis	Arthur Vining Davis Foundations
Wagner, M. Ann (Mathematics)	University of Wisconsin	Seth Sprague	Seth Sprague Educational and Charitable Foundation
Warner, Kimberly (Marine Science)	University of the District of Columbia	New England Farm and Garden	New England Farm and Garden Association
Whitney, Sheri (Biology)	Duke University	Virginia Walker Smith	Mr. Homer P. Smith

HISTORICAL SPOTLIGHT: SWIFT HOUSE

Ten School Street, known today as WHOI's Swift House, was constructed around 1834 by Ezekiel E. Swift. Swift had acquired the land for the house and two barns from Captain William Bradley, a sea captain whose former home on Woods Hole Road is now the Bradley House Museum.

Ezekiel Swift was a carpenter by trade, and he passed his profession on to his son Ezekiel Jr., who in turn passed it on to his son Edward (Eddie) Ellsworth Swift. The Swifts were well-known and liked in Woods Hole. Ezekiel Jr. and Eddie formalized the family trade into "E. E. Swift & Son" in the late 1800's. They built numerous private homes and other buildings in the area, including the First Congregational Church of Woods Hole at 22 Water Street (which has since been converted to shops).

Eddie Swift was probably the best-known and most colorful member of the Swift family. Born in 1861, during the first summer of the Civil War, he spent nearly all his life in Woods Hole and lived to be 103 years old. He liked to say that during his lifetime he saw the first train come to the village (1872) and the last one leave (1963). Eddie, who had no children, was married for 71 years; his wife lived to be 99 years old.

Though he worked as a carpenter for many years, he eventually gave up the family business and opened a hardware store in the barn next to his home. The store became something of an institution in the village in the ensuing decades, encouraged by Eddie Swift's good business sense and easy-going personality.

Before completely giving up carpentry work, however, Eddie took up boat-building, specializing in the small, sturdy boat characteristic of Woods Hole: the Sprintsail. Working in his lower barn, he built at least two sprintsails for the Woods Hole Yacht Club fleet, which were raced for several years. He was nearly finished building two other boats--one intended for his brother Helon--when Helon died suddenly around 1910. Eddie, stunned by

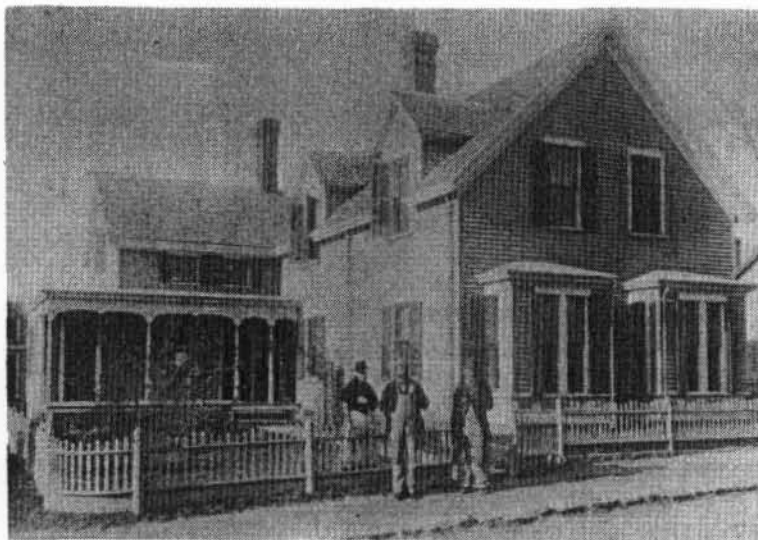
his brother's death, immediately stopped building sprintsails and locked the two unfinished boats in the barn.

Years later, during the hurricane of 1938, the lower barn was knocked down and the boats were washed, undamaged, across Eel Pond. Eddie promptly rebuilt the barn and returned the sprintsails to their place; they remained there, forgotten, until after his death in 1964.

WHOI purchased the Swift property from the family on New Year's Eve of that same year. The sprintsails were discovered in the barn the following summer, and one was eventually donated to Mystic Seaport in Connecticut.

WHOI adapted the barns to storage space for lab equipment and other supplies. The main house, renovated and dubbed "Swift House," was first used as offices for the Applied Oceanography group, later

to become Ocean Engineering. Since then it has housed members of the computer group, chemistry, Sea Grant, and other departments. In the last year it has become home for members of the Marine Policy Center and the Biology and G&G Departments. The exterior of the building is currently undergoing routine maintenance.



PHOTOS: Above is the Swift residence around 1900. Eddie Swift is standing in the center in front of the house; to his right is his mother, and to his left is his brother, Helon. (Photo courtesy Woods Hole Historical Collection.) At left is Swift's Hardware Store in 1964. (Special thanks to Jennifer Gaines of the Woods Hole Historical Collection.)

LYME DISEASE A DANGER DURING CAPE COD SUMMERS

It's been reported that several people at the Institution have contracted Lyme Disease this summer. Though this tick-borne illness plagues the entire New England seaboard, in recent years it has become a particular problem on Cape Cod, which has more reported cases than any other part of Massachusetts. Tick populations are highest on the Cape from mid-May to mid-August. Cool, damp summers encourage tick populations, while periods of hot, dry weather generally kill them.

Lyme Disease is caused by a spirochete, or cork-screw shaped bacteria, that is transmitted to humans primarily by bites from the deer tick, *Ixodes dammini*. *Ixodes* is a dark-brown tick about the size of a pinhead. The spirochetes live in its stomach and enter the victim as the tick feeds.

Lyme disease mimics other diseases and, consequently, until recent years, was often misdiagnosed. The first sign of infection is usually a red spot roughly 1 1/2 inches in diameter surrounding the bite. This "bull's eye" generally appears within 30 days and begins to spread about six days later until the outer border becomes darker than the inside. The infected person may suffer flu-like symptoms, such as stiff joints, muscle aches, headaches, and fatigue. Left untreated, Lyme Disease can lead to arthritis, heart problems, facial paralysis, and other significant health problems. However, if treated early, it can usually be cured by antibiotics.

If a person is bitten by a tick, health officials advise pulling the tick off with tweezers and putting it in a sealed jar, noting the date and location of the bite, if possible. Since the deer tick is found primarily in wooded or brushy areas, people venturing into such habitat are encouraged to wear long pants, long-sleeved shirts, and high socks. When leaving the area, a quick look at one's clothing for ticks is also advisable. People should also check pets carefully for ticks before allowing them into the house.

WHOI PICNIC WILL BE HELD AUGUST 14

This year's Summer Picnic will be held on Sunday, August 14, from 1:00 to 6:00 at Fenno House. (Rain date is August 21.) Volunteers and ideas are welcome. Call x2279 for information.

OCEANOGRAPHIC SHIP NOTES

ATLANTIS II and ALVIN departed Seattle August 1 on Leg 38 of extended Voyage #118 to continue the NOAA Vents Program. Twenty ALVIN dives for chemical, geological, and biological investigations are planned at two sites on the Juan de Fuca spreading center. Camera tows, rock dredges, and gravity cores will also be conducted. A port call is scheduled at Newport, Oregon, August 23-27, with a return visit to Seattle September 14-18.

OCEANUS arrived in Funchal, Madeira Islands, August 7 and departed August 10 for continued physical oceanographic studies in the eastern North Atlantic. Return to Funchal, scheduled for September 1-4, will be followed by an ocean engineering cruise ending September 19 in Cadiz, Spain.

KNORR completed Leg 6, the final leg of the Black Sea Expedition, on August 5 when it arrived in Izmir, Turkey. Following a transit leg to Naples, Italy, KNORR will depart August 11 on Leg 15 of Voyage #134 to test its dynamic positioning system and conduct engineering tests for the Deep Submergence Laboratory. The vessel is due in Cagliari, Sardinia, August 18 and will depart two days later for chemical studies in the western Mediterranean. A port call is scheduled for Cadiz, Spain, August 24-27. From there, KNORR will travel to Bergen, Norway, arriving on September 3. Acoustic tomography studies in the Greenland Sea are planned for September 6-October 6.

ATLANTIS II/ALVIN TO HOST MEDIA OPEN HOUSE IN SEATTLE

ALVIN explorations off the Washington and Oregon coasts will be the focus of a media open house aboard the A-II in Seattle on September 15. ALVIN's work at ocean floor hydrothermal vents has been in the news recently as a result of graduate student Cindy Lee Van Dover's discovery of a "glow" or faint light at the vents on July 26.

Although the "Van Dover glow" (as it was named by John Delaney of the University of Washington, chief scientist on the cruise) is not visible to the human eye, special low-light electronic cameras were able to capture the light. The source of the light is not yet known. Cindy, a Joint Program biology student in Fred Grassle's lab, hopes to conduct further studies on this phenomenon in the eastern Pacific in the next few months and on the Mid-Atlantic Ridge in 1989.