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001. letter	To Alicia Pelrine from Carol Rasco (partial) (1 page)	n.d.	P6/b(6)
002. letter	To Alicia Pelrine from Carol Rasco (partial) (2 pages)	01/19/94	P6/b(6)

COLLECTION:

Clinton Presidential Records
 Domestic Policy Council
 Carol Rasco (Meetings, Trips, Events)
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FOLDER TITLE:

Alicia Pelrine Lunch 6-1-94 12:00

rw173

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

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- b(9) Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

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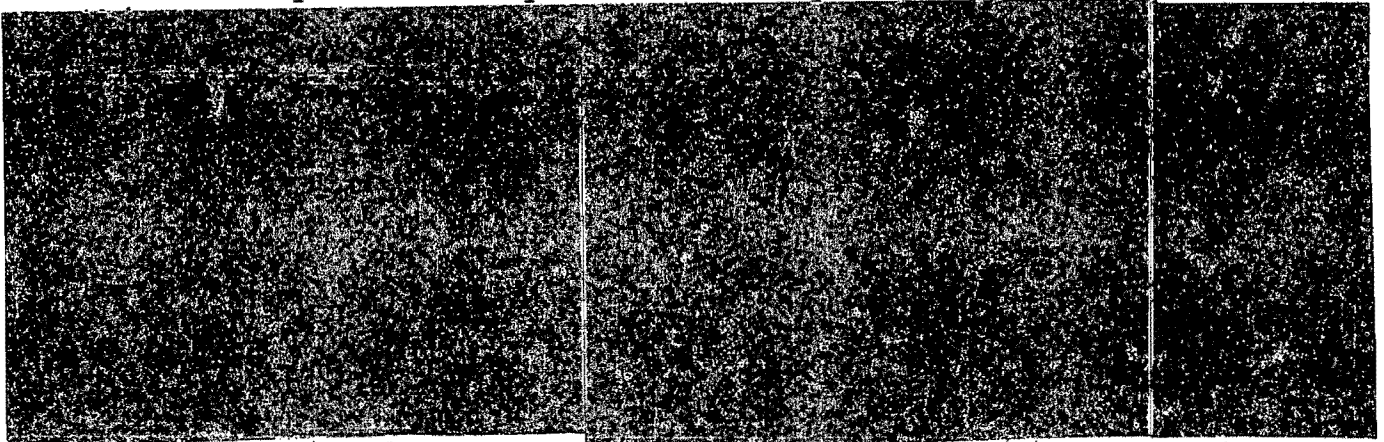
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Alicia Petrino

202-628-1140

Alicia:

I am sorry we continued to miss by phone last week after I first tried to call you on Monday. Late Tuesday evening I had to turn



As to my original call...we unfortunately found the attached letter which I thought I had mailed to you back in January. Even in January I had waited too long to respond to your letter of the end of November but alas, like the cobbler's children and lack of shoes, I had put your letter aside to answer over the Congressional recess/holiday period when things would be a bit calmer. Then the letter showed up in a file last week having become stuck to other materials. All I can do is apologize.

Of course, school to work has passed now but it along with welfare reform are still priorities....I would love to set up with Bill Galston as suggested in the letter along with myself if you and your friends are still interested.

The next to last paragraph is still an invitation to visit on a personal level....I hope we can visit soon.

My best to you and Bob.

Carol

Carol Hampton Rasco

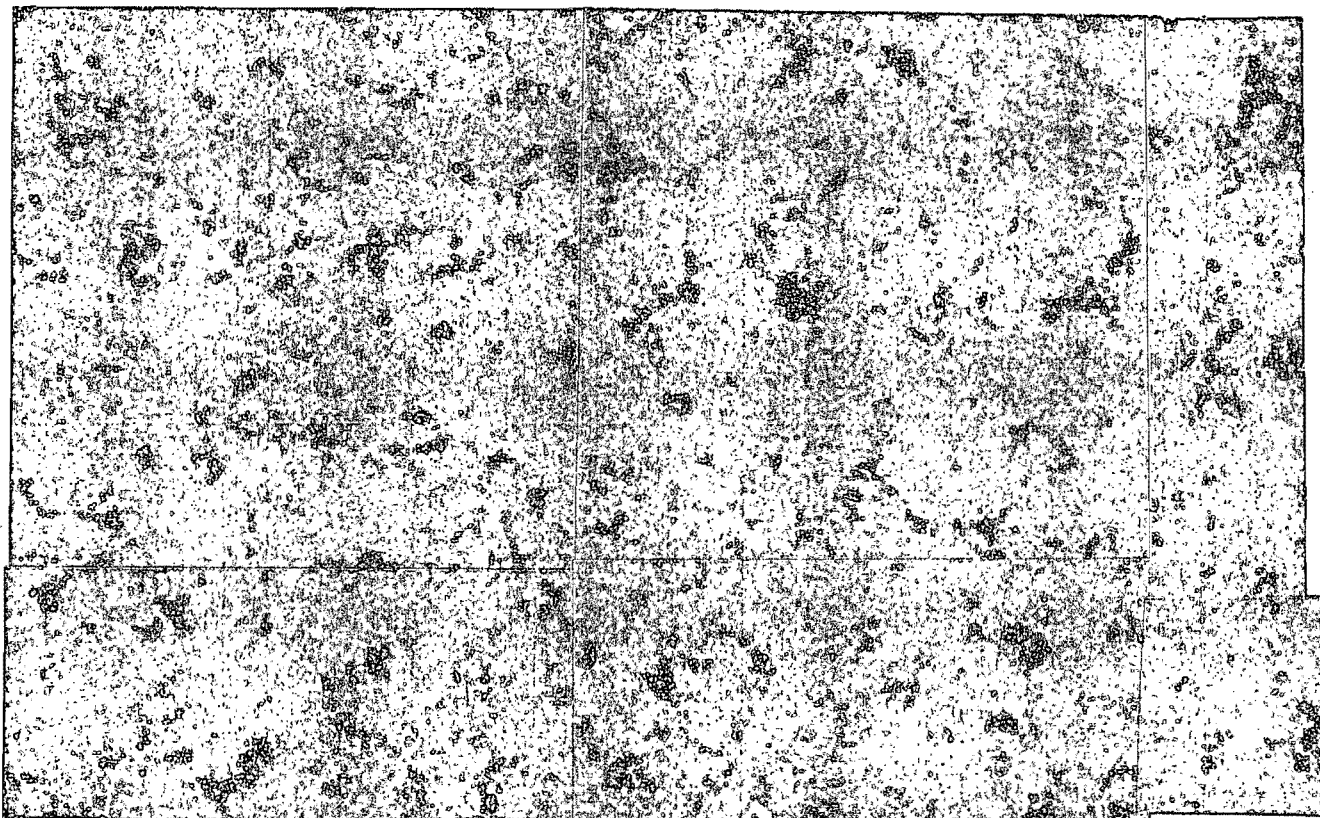
January 19, 1994

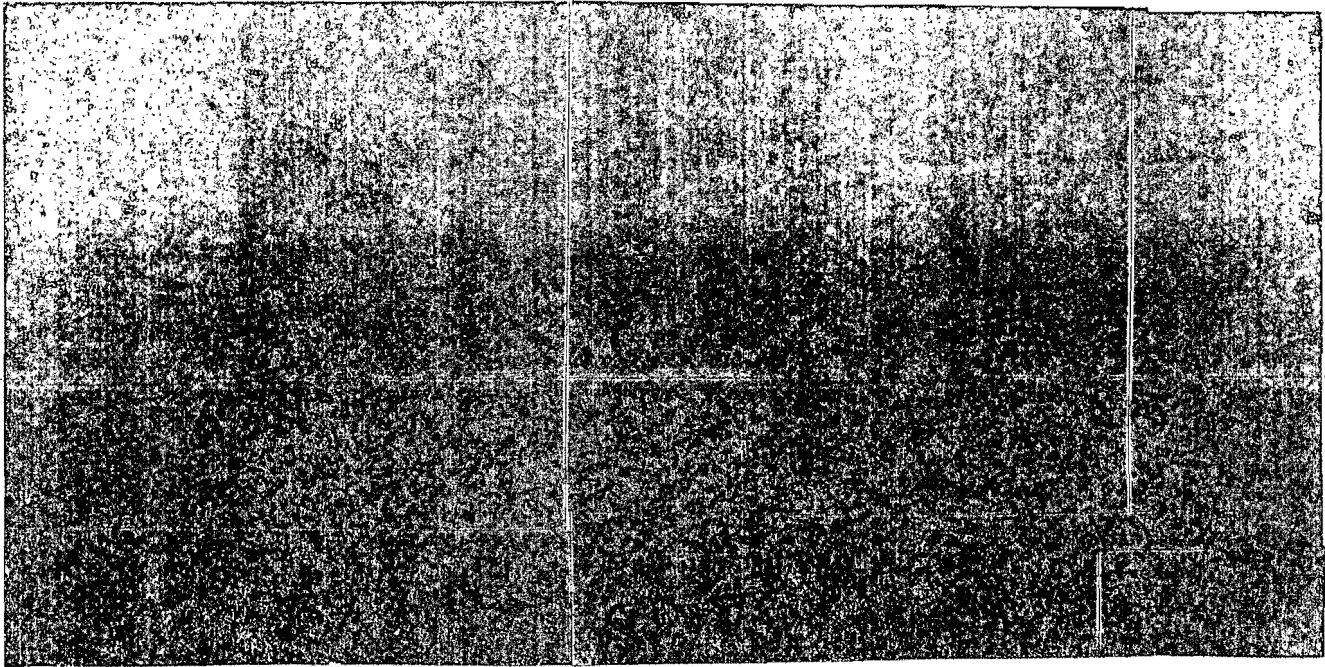
Dear Alicia:

I can finally turn to something other than the completion of the budget and health care reform although by this time next week we will be right back into the thick of things!

I appreciated the copy of the proposal for a school to work transition program; while I have not had the opportunity to read the full proposal, I did over the holidays read parts of it, and as you mentioned in your letter, it does sound very much like some of those long discussions we used to have in the midst of our welfare reform work.

I have passed along the proposal to Bill Galston on the Domestic Policy staff who is working on the school to work proposals. I would encourage Bob and Clark to meet with Bill as he can best share with them the types of proposals we will be putting forward to Congress in the coming year.





Again, thanks for sharing the proposal....school to work is a big
issue for us in the coming year.

Your friend....

Carol

**Alicia S. Pelrine
Yvonne Lutz Powell**

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(202) 628-1134
(202) 628-1140 (Fax)

November 29, 1993

Gretchen Engquist

69 Cumberland Drive
Lincolnshire, IL 60069
(708) 374-0930
(708) 374-0930 (Fax)

Ms. Carol Rasco
Assistant to the President for Domestic Policy
2nd Floor, West Wing
The White House
Washington, D.C. 20500

Dear Carol:

Several friends of mine in Annapolis have developed the attached proposal for a unique school to work transition program designed for the Bay area in Maryland. As we discussed it recently, it occurred to me that this is exactly the kind of idea we used to talk about in the old welfare reform days. It builds on a cultural tradition and provides exposure to non-college bound kids to a set of skills which will enable them to enter the work force in a variety of ways.

Dr. Bob Besse who initiated the proposal is the successful founder of the Maryland Draketail Project which involved parents and children in the building of two of these classic old boats. The boats built by the children and their families are now being used to environmental and science projects on the Chesapeake Bay. The project was widely acclaimed two years ago and Bob and his kids appeared on Good Morning America.

The other prime mover in the project is a fellow named Clark Poston who is a classically trained boatbuilder from Mystic, Connecticut. Until recently Clark lived and worked on Martha's Vineyard. One of his friends took the President and Mrs. Clinton sailing this summer. Clark's friend has sent a copy of the proposal to the President.

Bob and Clark are interested in exploring a consortium of potential funders for their project which they expect to be self-supporting after the initial seed money to used to get started. They are exploring both federal funding sources as well as foundation and corporate support.

I'd appreciate it if you could take a few minutes and look at their proposal. They would like the opportunity to meet with you, and possibly the President.

to seek an endorsement of the project and possibly some suggestions for funding part of the start-up costs.


I know you are a very busy woman these days but I think you'll actually enjoy reading this proposal. Hopefully, it will not only bring back fond memories of the welfare queen days but fit into the plans being developed by welfare reform next year.

This is not business for me. I am interested because I believe in Bob and Clark and I believe in the ideas they are advancing.

Please let me know what you think and whether you might help us by agreeing to a meeting at your convenience for them to tell you about the project themselves.

I hope all is well with you. I still hope that one day we might get together and have a real talk.

Sincerely,

A handwritten signature in cursive script that reads "Alicia".

Alicia Pelrine

THE DRACKETAIL MARITIME LYCEUM:
A 21ST CENTURY ENTRY TO HIGH SKILL CRAFTSMANSHIP

A Proposal

Submitted to

THE 103RD CONGRESS OF THE UNITED STATES

Through The Office
of

THE HONORABLE STENY H. HOYER

5TH CONGRESSIONAL DISTRICT OF MARYLAND
HOUSE OF REPRESENTATIVES
WASHINGTON, DC 20515

Respectfully Submitted
by

ROBERT W. BESSE, PH.D.
DRACKETAIL MARITIME. LTD.
SHADY SIDE, MARYLAND 20764
410-867-4820

September 1993

Précis: Draketail Maritime Lyceum

ISSUE: The state of this country's burgeoning adolescent population continues to perform sluggishly in the secondary school environment coupled with an incongruous school-to-work capability, poses a serious, long-term threat to the vitality and growth of viable entryways for our future labor pool into the competitive global marketplace, with its increasing demands for a high-skill, motivated work force.

INITIATIVE: It is proposed that the Draketail Maritime Lyceum be established in the southern portion of Maryland's western shore in the Fall of 1994. The Lyceum will be a high skills career school and national model for young adults age 16 and older and center of relevant learning set within the maritime idiom. The core of the fee-based Lyceum will be its boatwright school which will accommodate both residential and day students, and maintain a constant exchange with the corporate marketplace. The Lyceum has been designed as an on-the-ground national model to help meet the needs of our floundering school-to-work population.

STRATEGY For the Lyceum to come to fruition, two things have to happen: **(1)** the Clinton administration needs to prioritize a national response to the deepening pathology in the culture of learning and training among young people in this country; **(2)** appropriate corporate partnerships must be identified and established to defray the Lyceum's start-up and stabilizing costs.

IMPACT: The Draketail Lyceum is a serious school-to-work initiative which will do five basic things: **(1)** serve as a back-to basics, on the ground, national model for the burgeoning school-to-work population; **(2)** provide a catalytic learning site within the Chesapeake watershed of southern Maryland which features a multi-tiered, year-round learning environment with complementary on-site programs serving the K-12 student population; **(3)** harness the wealth of professional talent and maritime industry experience within the watershed and along the eastern seaboard to galvanize a unique staffing exchange network; **(4)** showcase applied cutting-edge technology in recycling systems and in engineering design, and **(5)** demonstrate that real-world corporate linkages in the context of a rigorous curriculum and the highest caliber staff are the foundation for sustainability and a multi-site replicable national model.

We are submitting to you the initial comprehensive proposal for the Draketail Maritime Lyceum. In its unique way, the Lyceum will have the full capability to deliver live and challenging learning opportunities to hundreds of children, older students, families and visitors. The Lyceum's project-centered programs will operate around the core of one of the most rigorous and career-tracked school-to-work models in this country.

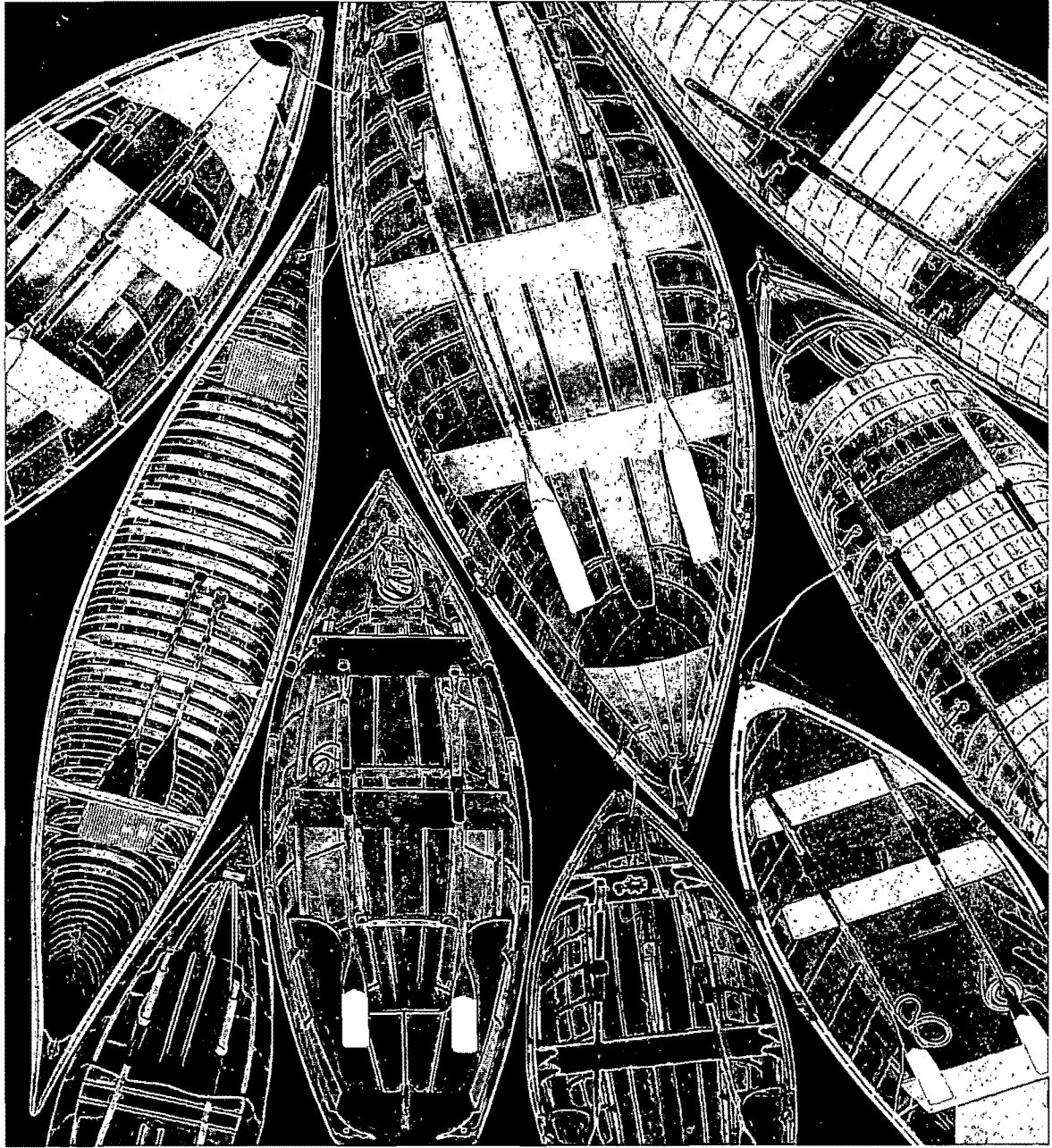


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Staff: Robert W. Besse
Clark O. Poston
Quentin D. Snediker
Sigrid Trumpy

Consultants: Kaufman Design, Inc.
Kenneth E. Court, P. E.
F. Michael Kaufman, C. M. S.
Harold M. Whitacre, III

Schwarz-Purcell
John J. Schwarz, R. A.

John P. Gutting
Anne Bray
Tom Cunliffe

E Biographical Sketch -- John Gardner

F Letters of Commitment:

Kaufman Design, Inc.
Marine Trades Association of Maryland, Inc.
Gannon & Benjamin, Inc.
Tom Cunliffe

PROLOGUE

President Clinton and his administration are committed to energizing a nationwide response to one of this country's most critical needs: a viable network of rigorous school-to-work programs which will harness yet untapped raw intellectual and physical energy and equip young people and older retrainees with the realistic potential for high skill careers, and an earned higher quality of life. Among other legislation currently passed or working its way through Congress to help meet this critical need are: The School-to-Work Opportunities Act of 1993, the National Maritime Heritage Act of 1993 and the recently passed National Service and Community Act of 1993.

Today, one need not hold a seat on the Carnegie Council or even read, for that matter, to have a real understanding of the gravity of this escalating developmental erosion among young people, and the huge gaps in the Culture of Learning which they have inherited:

- Half of this country's 20 million young adolescents (ages 10 to 15) are at risk of not fulfilling their full potential because of a lack of availability of constructive activities to draw them away from involvement in gangs or other destructive pursuits; homicide is the second leading cause of death among young people aged 15 to 24 in this country.
- Adolescents and young adolescents (nearly 30 million from ages 10 to 18) represent this country's greatest population of both perpetrators and victims of escalating violence - the market darling of the media; they also constitute the greatest involvement in alcohol and other drug addiction and abuse, as well as in generating a litany of sexually transmitted diseases (*Fateful Choices*, 1992).
- This country's juvenile justice system and traditional school calendar are woefully antiquated and constitute major impediments in dealing effectively with the equation of rage and disassociation in our adolescent and young adult population.
- This proliferating drive for immediate gratification among this culture's young people has left in its wake their widespread desensitization to and deformation of non-marketplace values and goals *fundamental* to the human condition. Additionally, this immediate gratification drive has birthed the distorted claim among many young people that they have the *right* to this material inventory - whatever form(s) it might take.

- Many of our traditional secular school systems have gone the way of this country's traditional corporate economy: quick payoff in lieu of long term stability and fertility for sustained and balanced learning and growth; test scores have become the grail and reflecting pond for many secular school systems.

- On the heels of these realities of young people in the United States, comes the results of the most comprehensive literacy study on adults ever conducted by the federal government. The results were shocking. One-third of the adult population of the United States is functionally illiterate. They simply do not have the thinking skills to earn a viable living in today's market. (National Center for Education Statistics, 1993).

INTRODUCTION

The crumbling dyad of our public education system and the American family was met head-on in 1983 in the startling U.S. Office of Education report, *A Nation at Risk*; again in 1984 by the incisive response of Brown University's Ted Sizer's Coalition of Essential Schools; in 1990 and 1992 by, respectively, RJR Nabisco's Next Century Schools and the New Schools Development Corporation. However, in the main, these visionary approaches to "take the long way home from school" and genuinely nurture learning were designed to meet the constellation of issues affecting conventional K through 12 age group classrooms. Still, millions of adolescents, many of whose raw potential holds great promise, continue to fall between the cracks for a plethora of socio-economic-institutional reasons. And their promise remains but a widening shadow in the realities of our global marketplace.

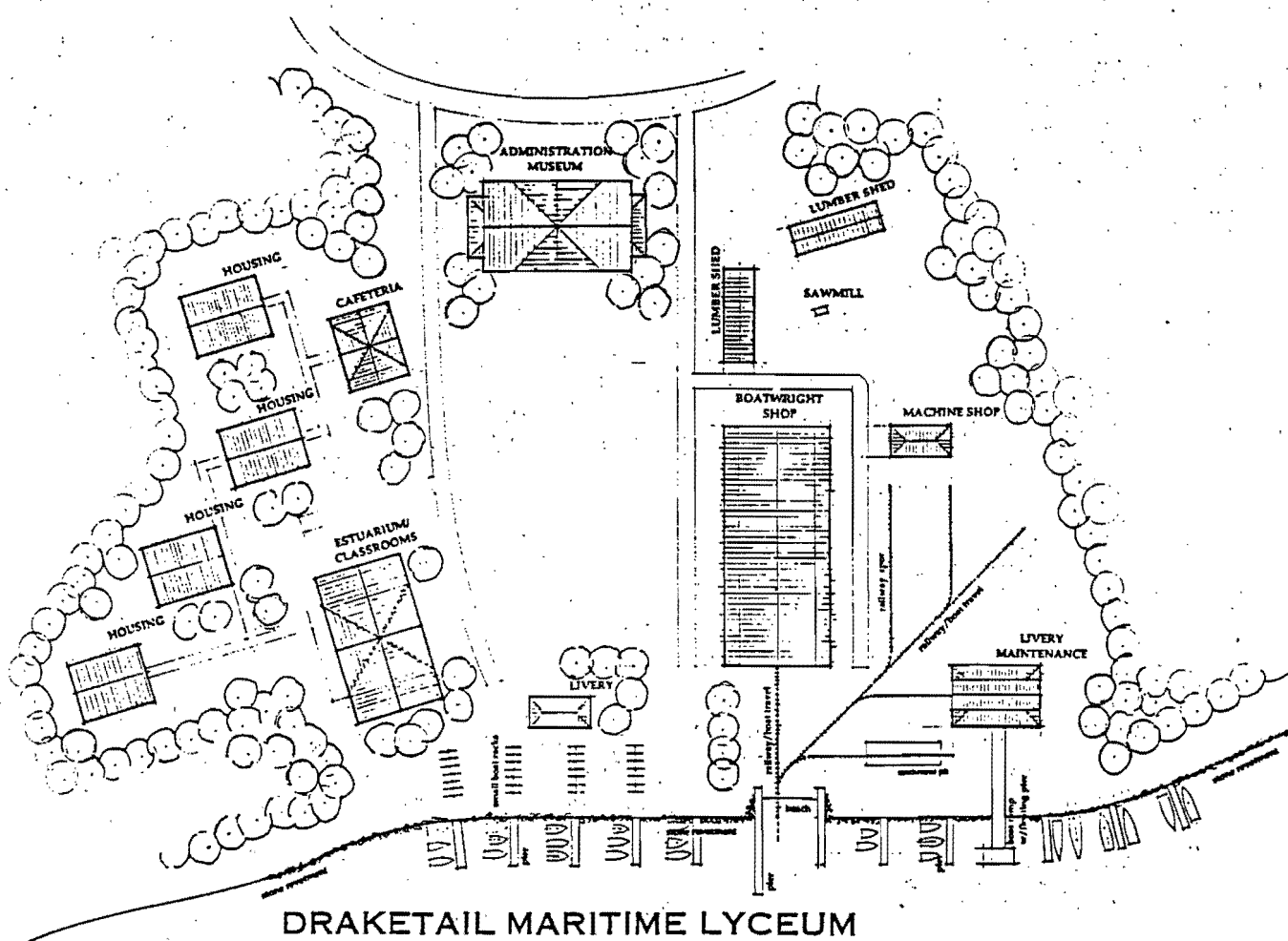
The Draketail Maritime proposes the establishment of the Draketail Maritime Lyceum in the southern portion of Maryland's western shore in the Fall of 1994. The Lyceum will be a high skills career school and national model for young adults age 16 and older and center of popular and relevant learning set within the maritime idiom. The Lyceum boatwright school will accommodate both residential and day students. The Lyceum has been designed as an on-the-ground national model to help meet the needs of our burgeoning school-to-work population. The operational Lyceum will be unique. But more to the point, the Lyceum is a thoughtful, multi-dimensional response to a critical need in learning and training - a response which is in woefully short supply on both the national and regional landscape. It is the quality and culturally-based nature of the Lyceum's pedagogical response which constitutes its greatest asset.

The Lyceum will be situated on landscape of the Chesapeake watershed's maritime culture history which has thrived for hundreds of years prior to European contact in the early 17th century. The Lyceum's learning initiatives evolve from a widely demonstrated local, regional and national need to offer a greater range and depth of experiential and relevant learning opportunities to a broad population.

Most importantly, however, the Lyceum will serve as a unique response to meet the needs of the many young people whom President Clinton wants to serve. In many ways the professional staff of the Lyceum will take its students back into the 19th century so that they can make a productive career transition into the 21st. Large segments of our population constitute enormous, untapped resources and competencies. Time and pace adjustments must be made in a healthy learning environment in order to unlock these resources, and seed our economy with truly skilled and focused work force. Conventional warehousing of students simply cannot and will not accomplish this any longer, and accounts for much of the drop-out rate of students with significant promise - not to mention the concomitant societal impacts of these institutional failures.

The Lyceum will be a site in which its students and all its visitors will take great pride - most especially the people of the Chesapeake and Delmarva region. What the Lyceum will not be is a static experience. The Lyceum will evolve as a high skill training school and applied science showcase, which demonstrates through its daily operations, cutting-edge recycling resource technology in a variety of mediums - predominantly wood, plastic, oil, solvents and fresh water. Recycling of waste products will be a hallmark throughout the Lyceum site. The merit of each process (as well as the costs of non-recycling) will include a palatable explanation for the public's education. Original usage wood will be Atlantic coast timber wherever possible.

The Lyceum integrates five primary operational and physical plant components: (1) The Gardner School for Boatwrights; (2) The Livery ; (3)The Estuarium; (4) the Lyceum Museum, Administration and Library and (5) the Residences and Cafeteria. The stylized rendering below provides a macro "osprey's" view of the proposed site:



site plan
1 : 40

BACKGROUND

The Draketail Maritime Lyceum is the proposed natural extension in non-traditional learning of the Draketail Maritime Project which evolved in Shady Side, Maryland, in December 1990. The Draketail Maritime Project was a community-based response to lead children and their families to learning by participating in a processual series of maritime-oriented, "hands-on" challenges based on synergy and delayed gratification. The centerpiece of this two-year experience was their original construction of a 40-foot Hoopers Island draketail oyster boat - a rare, sleek Chesapeake Bay workboat which proliferated in the Bay during the 1920's and 1930's. The children and families named their draketail, the *John Gregory*, after the famous octogenarian boatwright who, for eighteen months, led them from dream to fruition, just five months before he passed away.



The Chesapeake draketail oyster boat, the *John Gregory*, with some of the Marylanders who built her in 1991-92.

The Draketail families and volunteers also rejuvenated a donated, 47', 1934 draketail charter boat, the *Mary Edna*. Both vessels have served as a wellspring of participant and community pride and responsibility, as well as unique learning and research vessels. Critical to the understanding of the mandate for the Lyceum initiative, an overview of both this country's and this region's "culture of learning" is offered.

The National Landscape

Our children's educational system has been surgically examined for much of the past two decades. The expanding search for the educational grail has sought the answer to what has been happening to our children and young adults in the "culture of learning" which they have inherited, namely, the full spectrum of socio-cognitive experiences, from pre-school through college. Nationally, too many pre-adolescent and adolescent children do not, or cannot, manifest the will to learn. Widespread parental complacency and/or confusion accounts for much of this (Carnegie Commission, 1991):

"A large number-probably a majority-of American public schools are failing to prepare their students adequately for the jobs of the future, for life in a diverse culture, or for the civic responsibilities so essential to democracy. This conclusion is supported by both expert and political assessment, even though some public schools provide an excellent education for college-bound children from middle- and working-class families. Most families, in fact, think their local schools are fine-not realizing how inadequate their children's education may be in light of tomorrow's higher demands for skills and judgment."

The September 1990 and 1993 National Assessment of Educational Progress (NAEP) paints a prophetic picture:

"When the NAEP results are taken as a whole and related to our country's overarching goal for student achievement and citizenship, the result is a bleak portrait of the current status of student achievement in the United States. Large proportions, perhaps more than half, of our elementary, middle-school, and high-school students are unable to demonstrate competency in challenging subject matter in English, mathematics, science, history and geography. Further, even fewer appear to be able to use their minds well."

John Chubb, an educational scholar at the Brookings Institution, wrote (1990): "U.S. Educational policy over the past three decades has been a massive experiment that has tested whether spending more money will result in better-educated students. The results are in. The experiment has failed."

Most recently, a newly released study by the American Legislative Exchange Council, *Report Card on American Education* (September, 1993), provided more fuel to Chubb's 1990 analysis. It demonstrated that since 1973 overall education spending increased 47 percent and per student outlays were up 62 percent. Further, this latest analysis demonstrated that 10 Midwestern states, most with the lowest per-pupil expenditures, lead the nation in all measures of student performance, including mathematics achievement test results, graduation rates and SAT and ACT scores.

Maryland ranked towards the lowest third of the 42 states studied. C. Emily Feistritzer, who headed this study, indicated that smaller schools, high expectations of students, rigorous and challenging courses and well-managed schools are key components to school success.

Today, against the backdrop of the culture of violence and immediate gratification which we have spawned in this country, the "at risk" label has serious application to virtually every group of children on the socio-economic spectrum - from Scarsdale, New York to Tupelo, Mississippi - urban and rural. Many of today's risk factors have an insidious quality about them, in both how and whom they affect. The W.T. Grant Foundation's (1988) *The Forgotten Half* study speaks most lucidly to this reality.

This two-year study of 20 million non-college-bound young people presents one of the most credible demonstrations that, as young Americans (16-24 year olds) negotiate the passage from youth to adulthood, a growing number of these young people flounder and carve out a life in the gray twilight of either non-success or outright failure. Again, from the Grant study: "For these members of the Forgotten Half, their lives as adults start in the economic limbo of unemployment, part-time jobs and poverty wages. Many of them never break free."

The Draketail Maritime Lyceum looks at students in three contexts: First, there are those students who are evaluated under a constellation of Federal, State and local institutional guidelines and are termed to be "at risk". Often, children are grouped in the "at risk" category because they have been retained in a grade, because of attendance or discipline problems, or because of other factors which individual teachers take into account.

Secondly there are the students who appear to be developing normatively within their home/school environments.

Finally, the Draketail Maritime Lyceum sees a third group of young people today. This group defies the facile affixing of conventional, cultural pathology labels. These are the children whose socio-cultural disassociation is so elusive as to often be virtually non-detectable until a heavy toll is taken, usually near the end of high school, or after high school graduation when they enter the service economy.

Simply put, these are the children, especially in their pre-adolescent and adolescent years, who are on their way to "falling between the cracks". These are the students who are insidiously at risk. This group shows up across all of our socio-economic strata. These are the students who physically show up in school, pass most of their tests, may often be very glib, but who, in fact, actually learn and retain very little. For them homework is a *pro forma* exercise; they study for a static letter grade so as not to call attention to themselves. For them, the binary couplings of hard work and payoff, and of intellectual curiosity and self-identity, are essentially alien. This "silent mystery" is perpetuated as these young children grow into young adulthood; and their families, schools, communities and centers of work are shocked by the recalcitrance and/or ambivalence of these young people. As they grow into adulthood, many of these students become an increasingly heavier societal burden. They lack a normative and adaptable social skill inventory, self-worth, marketable intellectual and/or trade skills and a focus on viable career tracks.

The Regional Perspective

Maryland continues to experience a thirty percent drop-out rate in its high schools (Children's Defense Fund, 1990). In particular, Anne Arundel County has the highest dropout rate for a suburban county in Maryland. In 1991 the county graduated only 71.9% of its high school students. The 1990 Anne Arundel 9th grade students who took the required Maryland functional tests scored dismally unsatisfactory marks in math, citizenship and writing.

The 1992 Maryland tests of eighth, fifth and third graders in math, social studies, reading and science, again showed poor results. Chubb and Moe (1990) make a poignant observation:

"Indeed, researchers have generally been unable to establish a statistically significant relationship between student achievement and any of the school characteristics that are often thought important: teacher-pupil ratios, teacher education, teacher salaries and per pupil expenditures. This should come as no great surprise. Over the last two decades, as school performance has deteriorated and stagnated, per pupil spending on schools had increased nearly 100 percent after inflation; class sizes have shrunk more than 20 percent, and most teachers have acquired masters degrees. The influence of family background appears to have overwhelmed everything else."

Historically, southern Maryland has been a seat of specialized agriculture, maritime industry and trade. It is in these three areas where southern Marylanders have hung their respective "cultural hats" -- generation after generation. Since World War II, dramatic demographic and social changes have significantly widened the intergenerational gulf -- where extended kinship bonds have always served both as the linchpin for socio-economic vitality, as well as the credible model of industriousness and self-actualization for children. Divorce, distance, commercial pressures and mobility have exacted a great toll on, traditionally, the most solid allies for generating self-worth, direction and support. But in the 1970's, much of that socio-economic-demographic equation underwent a dramatic change.

In the early 1970's, much of rural Maryland's western coast began what would turn out to be a quarter of a century of headlong change. For many children of both that time and today, those years heralded the beginning of what could now be called "*the rootless present*". Big business, meteoric real estate speculation and wholesale changes in infrastructure and maritime technology moved into the Chesapeake Bay, and, in so doing, displaced the cultural underpinnings of a significant population.

The impacts were both profound and irreversible. Parallel to these developments was a dramatic reduction in culturally tied, experiential learning in the school system. While operating, these programs had served as a key link in nurturing young people's cultural identity -- particularly in the rural area south of Annapolis, down along the southern reaches of Maryland's western coastline. Today, in 1993, this dramatic culture change has impacted the coastline populations of the entire United States.

But, far and away, the predominant deleterious impact of these major cultural shifts was what it did to the network of family units Chesapeake Bay's western shoreline watershed - and for that matter, along most of the Atlantic seaboard.

And within this traditional network, these cultural changes saw their greatest impacts in the generations-old, maritime domains of economic control, economic self-sufficiency and socio-economic self-worth. Decades of overpopulation and development, greed, over harvesting, ignorance of fundamental realities - all had finally taken their toll.

The erosion of these three cultural foundation blocks had a profound effect on the parental generation of the 1970's, whose children are now in middle school and high school. These are the children who have inherited a socio-economic landscape which is punctuated by a type of disenfranchised parental generation -- who were themselves as children, heirs to an irreversibly weakened maritime economy. Visionary and coordinated resource management came too late for too few.

Currently in Anne Arundel County, the sluggish economy is hitting unskilled labor the hardest, many of whom are high school dropouts. By the year 2000, the dropout situation in the county will exacerbate a growing economic problem caused by more jobs requiring higher skill levels, more demand for young workers, and fewer young workers in the labor pool. The young people who have either dropped out of school or who have fallen between the cracks will constitute a part of this smaller work force facing increased foreign competition through the reality of a global marketplace, emerging technological developments, fewer unskilled jobs, and greater demands for productivity.

Methodology

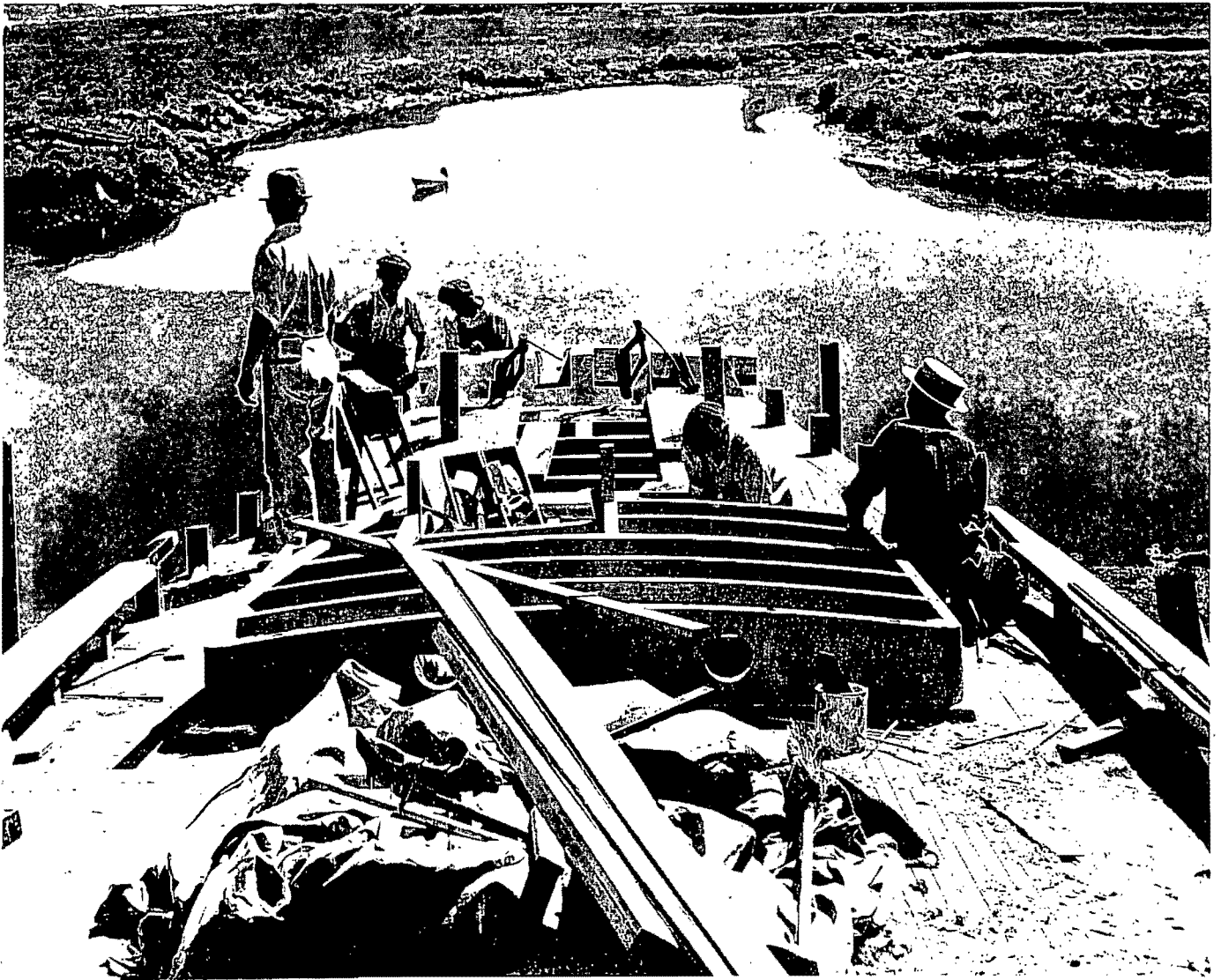
In its pedagogical protocol, the Draketail Maritime Lyceum will model its operational and curriculum protocol after the strengths of established programs, such as the joint Williams College and Mystic Seaport Museum learning venture, as well as established career track programs at the Wooden Boat School in Seattle, Washington and the Landing School in Kennebunkport, Maine. The Lyceum methodology is applicable to all of its learning model matrix which will be generated by the Boatwright School, the Livery, the Museum and the Estuarium.

- The Draketail Lyceum is responding to a very real and serious need in the areas of catalytic learning and high skill training/re-training and both young and older adults who have demonstrated great competence, but whose educational experiences had been counterproductive so as to foreshadow development.
- The combination of asymmetrical and linear instruction methodology will constitute the baseline instructional protocol which promotes the least threatening and most productive environment for the widest range of students' performance capabilities. Asymmetrical instruction can best be defined as sustaining the nine fundamental principles of learning described in TheodoreSizer's classic work, *Horace's School* (1992), which is the essence of the Coalition of Essential Schools formed at Brown University in 1984. Linear instruction bridges the gap between instructional material covered in a course and its relevance in the real world's marketplace.
- The students of the Lyceum will be *led* to learning - not conventionally taught, by attracting the finest professional staff available in the industry.
- Many learning modules will use a **maritime idiom** which offers the least resistance for acceptance among the greatest numbers of potential students along the coastlines of this country.

- Longitudinality and delayed gratification make possible the roadway for serious processual learning - particularly in the high skills boatwright program.
- By participating in an extensive network of professional academics, researchers, scientists, engineers, designers and architects, the Lyceum setting offers a productive learning environment for short term adult seminars on a wide range of relevant topics.
- The Chesapeake region is home to a broad resource pool of practicing scientists, engineers and other technical professionals whose talents will be used extensively in the development and implementation of the Lyceum curricula.
- Additionally, the Lyceum will integrate the considerable talents of many of the region's elders who are both willing and able to share the special perspective of their knowledge.
- The Lyceum will use the skills of the finest staff (both in-house and consultant) available, a staff which will be the underpinning of an efficient, rigorous, effective and highly productive model for learning, training and re-training. Academic tenure will not be offered at the Lyceum. Retention and bonuses are based on merit and productivity. Annual reviews will include student and peer inputs.
- In its effort to maintain a constant peer and curriculum review, the Lyceum will sustain an active role in collaborating with the network of maritime schools and centers throughout the United States, Canada and Great Britain.
- Gardner School student candidates will be carefully screened for background, competence and commitment.
- The physical setting for the Lyceum within the Chesapeake watershed has a long history of maritime commerce and trade, most notably in small craft design and construction over the course of the last century.
- Integrating the aesthetic historicity of the Lyceum site, in combination with all the demanding components of the Gardner School for Boatwrights, the multi-faceted, interactive Estuarium and the unique features of the Lyceum's Livery, this maritime learning center will be unique in all of the United States.

THE OPERATIONAL UNITS (5) OF THE LYCEUM

1. The John Gardner Boatwright School



"Trust youth, give them room, permit them to develop as whole persons; ask, and set no upper limits in asking, and they will rebuild the world."

John Gardner
Mystic, Connecticut

Historical Antecedents and Precedents

Born the fourth of seven children in a family living on an annual grant of fifteen dollars from the Salem Marine Society, Nathaniel Bowditch was forced from his schooling at the age of ten to work in a ship-chandlery. Driven by an all-consuming interest in learning, he had achieved Salem's recognition as an authority on the subject of mathematics by his middle teens. Books were brought and five languages consumed and at the age of 16 he began to study Newton's *Principia*, translating parts of it from the Latin. Led by three Harvard Graduates to the Philosophical Library Company, (then the foremost library north of Philadelphia) Bowditch studied the works of the great mathematicians and astronomers after his long working days. By the time he began his sea-going career at 21, he was recognized as the outstanding mathematician in the Commonwealth. At this time no method of keeping accurate time was available to the average naval or merchant ship. In 1802 at the age of 29 and with no formal academia, Nathaniel Bowditch published the first edition of *The New American Practical Navigator*, a book which undisputedly paved the way for American supremacy of the seas during the clipper ship era, and is to this day considered the navigators bible.

Of that great era when the fastest ships that ever sailed were transporting our goods to the East Indies, to China and Sumatra, the average age of an American clipper ship captain was twenty-one; and the foremost designer and builder of these great sailing ships, Donald McKay, was in his prime at the age of twenty-three. Of the next generation John B. Herreshoff, blind and only seventeen, founded Herreshoff Manufacturing Co. in Bristol, R.I., and with his brother, Nathaniel, went on to design and build many of the world's most successful yachts. Of our foremost contemporary designers, Olin Stevens withdrew from MIT after barely one semester, and within three years he had designed the phenomenal six-meter *Dorado*, first in a line of winners that still dominate American yachting. He was twenty-one.

Significant accomplishments in our American past by young people who had talent, energy, enthusiasm, and total commitment but who were without formal academic credentials are simply too numerous to record. The building of this country down nearly to the close of the last century was to a large extent accomplished without benefit of degrees and diplomas. For many American youth the unnatural rigidity of our present school system will systematically stifle both their talents and energies by not allowing them to develop as whole persons.

The evolution of boatbuilding, one of the cornerposts in the foundation of this country, produced one of the highest levels of craftsmanship we know. This craftsmanship contained all the elements of engineering, form/function, and production from raw material of the intricate hull shapes which placed this country in the forefront of maritime trade and industry in a global arena.

Moreover, that this craftsmanship obtained its peak prior to the development of man-made synthetics establishes conventional wooden boatbuilding as the root and foundation of the industry.

The Gardner School for Boatwrights at the Lyceum has three fundamental goals:

First, it is the design of this curriculum to firmly implant this same skill and craftsmanship described above that it may serve at the very least as a springboard enabling the graduate easy transition into the many varied methods and materials of today's industry. Secondly, to endow the graduate with state-of-the-art skills in accounting and marketing so that they are fully equipped to enter into their own business, and confidently take their place in the marketplace of our global economy.

Finally, ultimately, it is our goal to provide an intellectual and physical environment which will foster, nourish, and inspire that same talent, energy, enthusiasm, and total commitment which built this great country from its maritime roots.

The boatwright school is the aorta of the Lyceum; it is its center. The two-and-a-half-story post & beam structure (the boatwright shed) which will house it, will showcase the intellectual, physical and community energies of the region. The structure will house the most advanced passive solar heating and circulating water-cooling capability which can be incorporated, in cooperation with the University of Maryland's Engineering Department.

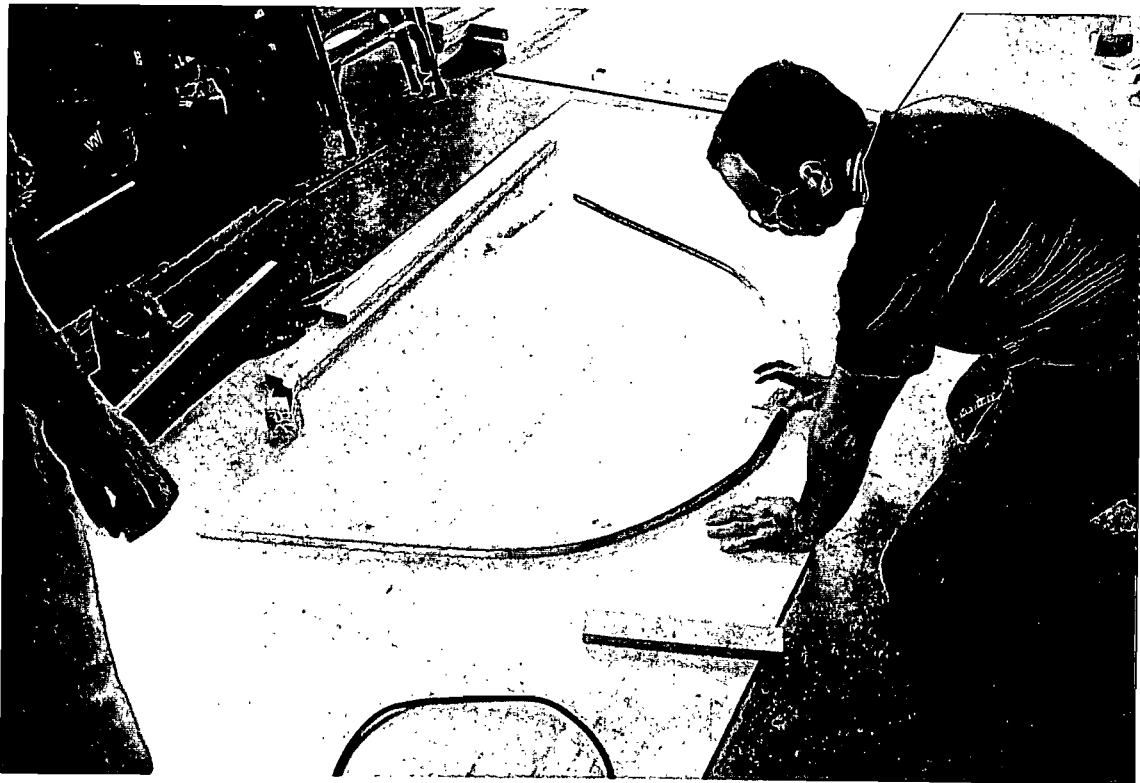
The boatwright shop will be modeled after a turn of the 19th century Chesapeake Bay oyster house. Aesthetically, the boatwright shop is a return to wooden plank floors and Mozart and a sense of craftsmanship for which the Chesapeake was once world famous. We will solicit the old order Amish from southern Maryland to help erect this and the other timber structures, regional volunteers, as well as solicit public television's interest through the *This Old House* and/or the *Maryland Outdoors* series.

The target co-ed population will be age 16 to 21. Additionally, older career retraining students will be encouraged to apply. The strength of the Lyceum's boatwright school rests in the caliber of its staff and the rigor of its curriculum. A broad brush stroke view of the curriculum will include timber ecology, practical theoretical and applied mechanics, rendering, form, function, drafting, surveying, modeling, lofting, tool construction, yacht design, marine engineering, architecture and marketing. In its first year of operation the school will be able to accommodate up to 20 residential students and by the start of the 3rd year (Sept. 1996) the staffing and residential capability will accommodate 100 full-time students. Other features of the Boatwright School:

- rigorous academic and applied curriculum
- screened, nationwide student representation
- 3-year certified, national standards program
- collegiate exchange program (1 semester)
- weekend/winter nights adult classes
- seat of the Lyceum's "tree to the sea" initiative
- regular interfacing on site with both State and Federal forestry management, scientific and corporate professionals
- regular curriculum evaluation, consultation and coordination with the first-line maritime schools within the United States, Canada and Great Britain
- strong career retraining programmatic capability
- holistic, asymmetrical/linear learning protocol
- intensive primary research & documentation of American small craft and technology
- the regular use of the marine railway which was an important tool dating back over a century.

Goals and Objectives:

- to foster and instill the disciplines, values, traditions, and skills of old world craftsmanship through the construction and design of wooden boats
- to promote and model self-esteem, and self-reliance through sustained hands-on learning experience and responsibility



- to provide the training necessary to achieve a high level of carpentry skill with an in-depth knowledge of raw materials, tools, practical engineering, and the functions of form and shape
- to correlate this training with leading-edge methods in accounting fundamentals, marketing and business practices, conceptual design and logical, economic execution

GARDNER SCHOOL FACILITIES

In our emerging new country a spirit of cooperation and neighborliness brought whole communities together for the purpose of helping one family raise their dwelling. The timber-framing system was quickly modified so that large units could be preassembled, and the building could be easily erected in a day. So with this spirit of community and goodwill, barns and houses sprouted up in towns and across the country; wherever men and women were willing to work towards dreams - there was vigor enough in the land, in the forests, and in the people to make them real.

The need for human skill has slowly been sifted from the task of house building. There are carpenters who have practiced their trade for thirty years who have never made a mortise-and-tenon joint. Today, the studs are pre-cut, the windows and doors are pre-hung, the trusses are pre-built; working wood in the modern building trades most often means driving a nail through it. There is neither tough challenge nor thrilling reward; much of standardized outdoor wood stock is toxic; and lost with the knowledge and skill is some sense of personal dignity. Our modern communities revolve around dislocated shopping malls and 120-channel TV screens.

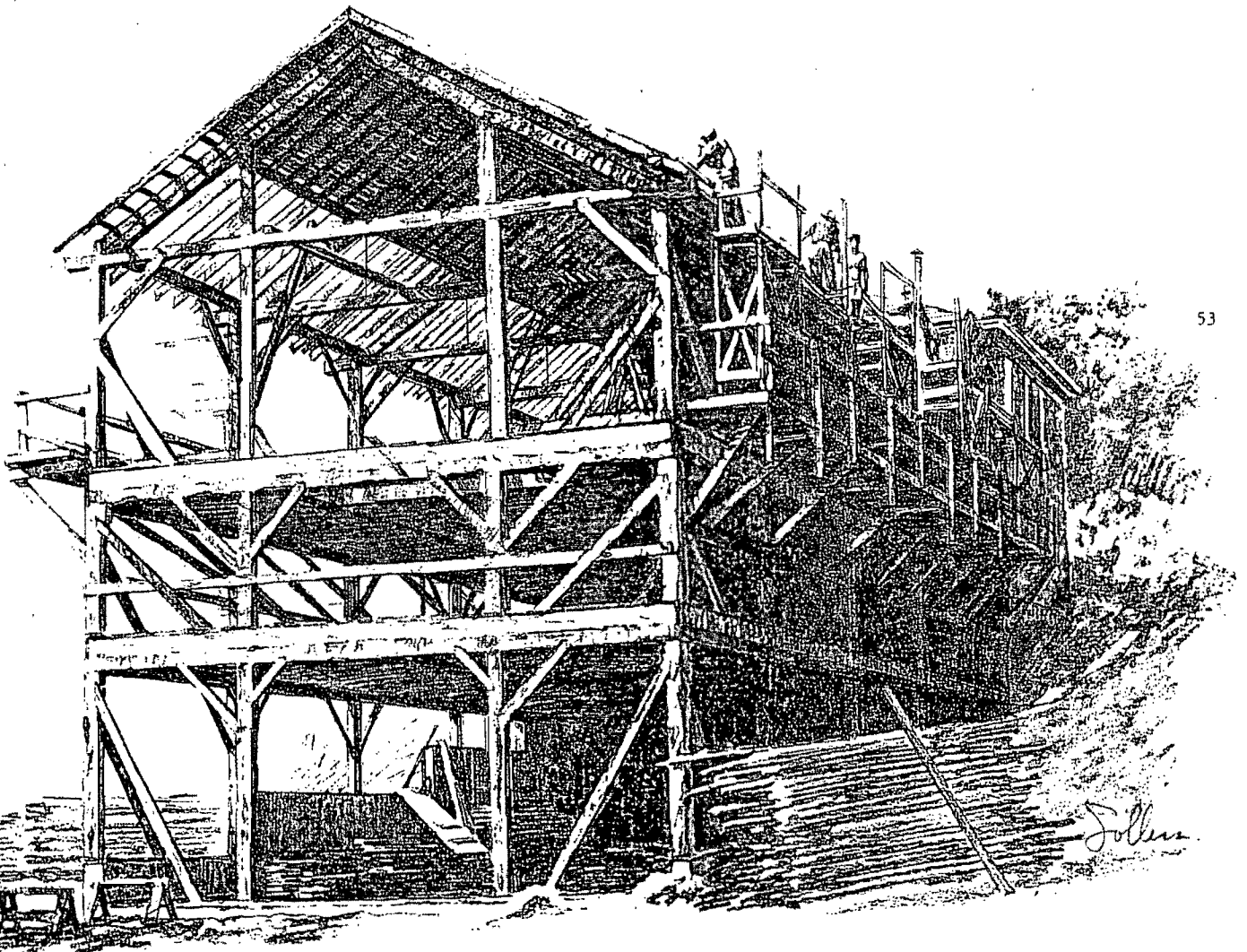
Raising frames and bents were commonplace community events as close as two generations ago. Within the Amish culture, belief in the virtues and values that lie in the traditions of old world craftsmanship is a life-guiding faith. We have an incredible opportunity to integrate cultures and touch our heritage. With community involvement and Amish guidance, we will erect all necessary buildings, shops and housing, except where the need for modern technology dictates as in the administration/library or estuarium. They will be timber-frame structures and/or 1/2 native log with passive solar energy systems.

In the following outline, the integral components of the Gardner School are discussed:

Marine Railway: to run from inside the main shop with spurs to feed the livery building, outside storage, and a catchment tank to filter the wash-down runoff.

Lumberyard: outdoor area to contain state-of-the-art sawmill, drying sheds, logs, and to facilitate the sawing and milling of raw material.

Main Boatwright Shop: 11,250 sq. ft. post and beam structure to house all boatbuilding operations and requisite machinery, stockroom, upper level mold loft, and visitor's gallery. The sketch below captures the essence of the proposed Gardner post-and-beam structure:



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Foundry and Machine Shop: 800 sq. ft. building to house all foundry and machining operations.

Livery Shop: 2,400 sq. ft. building to store and maintain livery small craft

Livery Office: dockhouse building to administer livery rental and training operations.

Livery Docks: deep water slips to moor the larger vessels in the livery program.

Livery Beach and Outdoor Racks: waterfront beach with open boat racks to facilitate the dispensation and observation of the livery small craft.

Maritime Library and Museum: to exist within the main administration building and to house the several thousand volume collection of maritime books and other publications relevant to the core curriculum; integrated computer systems (networking with all major maritime museum libraries nationwide); ships plans, photographic material, oral-history tapes, and other documentary material which substantiates both our maritime heritage and the direction of the future.

THE GARDNER SCHOOL'S PROGRAMMATIC SCOPE

"From Tree To Sea"

The Three-Year Core Program: Using traditional American small craft as the focal tool, this three year course of hands-on study is designed to instill through leadership the cultural foundations of a maritime society, the skills and knowledge required to conceptualize, create from raw material (and replenish same), and market a viable product - all resulting in a sustainable high-skills career track. Requisite ancillary courses in communication (both oral and written), applied mathematics and engineering, applied sciences, and state-of-the-art business practices assure Lyceum graduates of the necessary foundation and high skill level to enter and contribute to America's work force in many capacities, including sole proprietorship. Annual tuition will be \$9,500; room and board, \$6,000.

Collegiate: Modeled from the highly successful Mystic/Williams program courses will be developed in conjunction with other schools to provide hands-on learning and character development utilizing any aspect of the core curriculum.

Existing partnerships include St. John's College, Annapolis, and U.S. Naval Academy, Annapolis. Other targeted schools include the University of Maryland and Washington College, Chestertown; and secondary schools within the region including the secular systems; The Key School, Annapolis; Severn School, Serverna Park and the Calverton School, Calvert County, Maryland.

Adult/Amateur: A series of courses covering all aspects of the core curriculum offered in long weekend or successive nightly sessions targeted to provide the amateur/home boatbuilder with any instruction necessary for the safe, enjoyable, and successful completion of a home project.

Community/Recreational: A series of courses covering all aspects of the core curriculum offered in daily, 2-4-day weekend, and successive nightly sessions targeted to provide a safe, enjoyable, and successful hands-on learning experience for the recreational enthusiast.

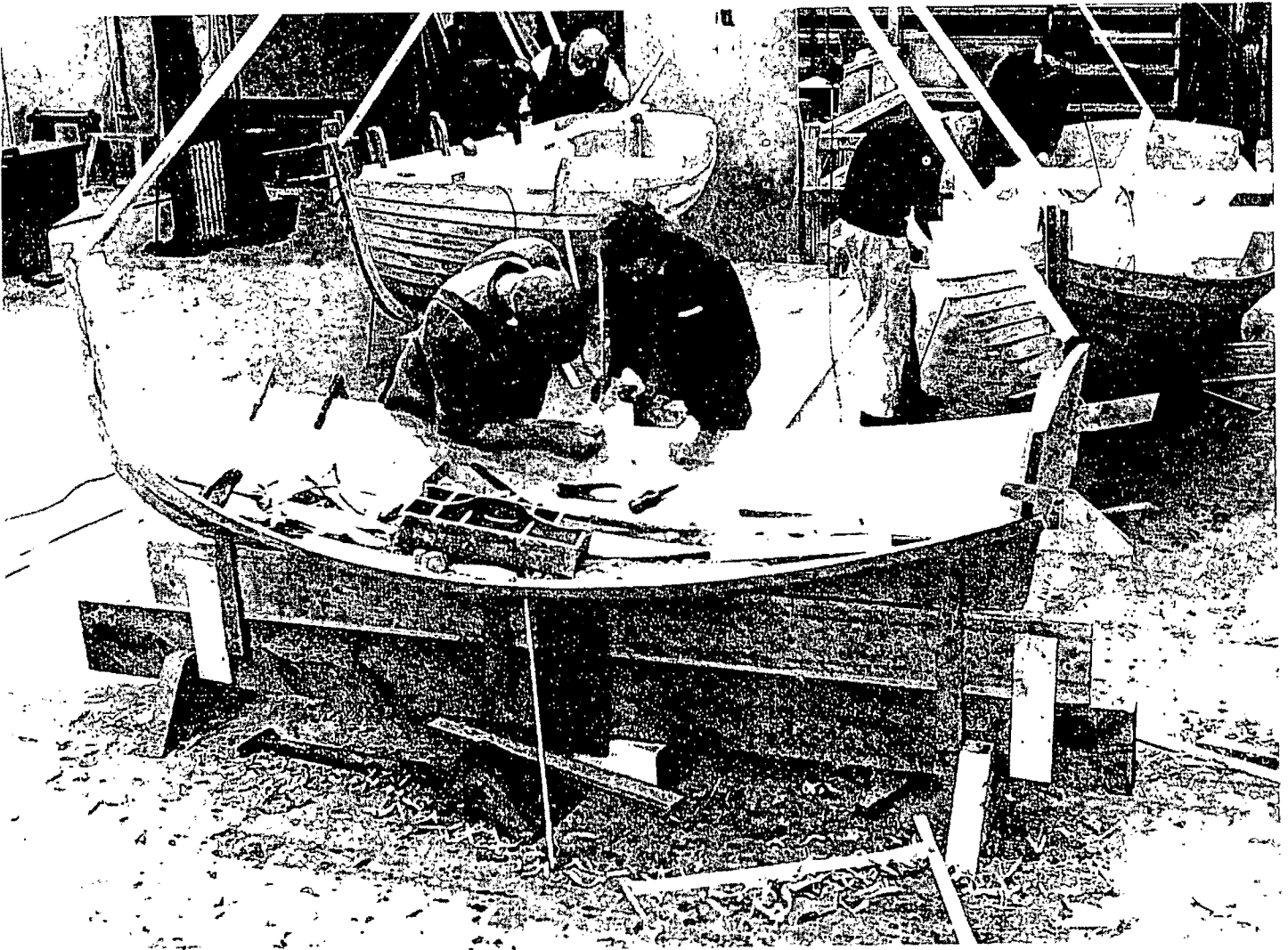
BOATWRIGHT SCHOOLS (U.S.) - TABLE OF COMPARISON

School	Yrs of Operation	Course Description	Training Level	Teacher student Ratio	Annual Tuition	Yrly Enrollment	Project -ed Enrollment
Artisans School, ME	2	2 yr.; 50% boatbuilding; 50% academic	Academic	1:10	\$9,500	19	40
Landing School, ME	15	1 yr boatbuilding; 1 yr yacht design	Voc. & Academic	1:10 1:18	\$6,300 \$6,300	40- 45	45
Mystic Seaport, CT	20	recreational boatbuilding	Recreational	1:4	\$300/section	40	40
NW School of Wooden Boatbuilding, WA	15	6 mo. core boatbuilding program + individual recreational-level boatbuilding courses	Voc. & Recreational	1:10	\$3,800	40	40
Westlawn Marine Tech Instit.	63	2 yr. home study in yacht design	Academic	N/A	\$4,000	500	500
Wooden Boat School, ME	13	Curriculum of recreational boatbuilding courses	Recreational	1:8	\$500/course	750	750

THE LIVERY: A viable boat livery operating on the shore completes the circle and serves several functions. The livery will consist of twenty-five to thirty-five boats selected from America's extensive and diverse small craft heritage. (Refer to the color photo behind title page.) These classic craft will be built as replicas of older types by the students in the boatbuilding courses, or restored in special courses covering boat and yacht restoration. The boats will be rented to the public or in some cases operated by a qualified captain taking both recreational sailing trips and educational /research trips. Requisite levels of skill will be given each boat type and corresponding instruction will be available. Rowing, sailing, and powerboat clubs will be encouraged. Regattas, festivals, gatherings, and other gala events will abound.

Finally, within the functions of the livery lies a core educational program designed to make safe boathandling and good sense on the water easily obtained and popularly sought. This breakthrough program will be developed corroboratively with the U.S. Coast Guard, the American Boat and Yacht Council, the American Sail Training Association, and with consultation from the Royal Yachting Association, U.K. The program will combine classroom study with sea-time and result in certificates of competence being awarded upon the successful completion of a practical examination. The program will be graduated into several levels from small powerboat inland waterways to offshore yacht master and ocean navigation. Certificates will be recognized by the U.S. Coast Guard.

NOTE: The following pages begin a detailed description of the curriculum of the Gardner School Boatwrights' School.



The age-old mysteries of design and engineering unfold gracefully on the wooden floor of the boatwright's shed.

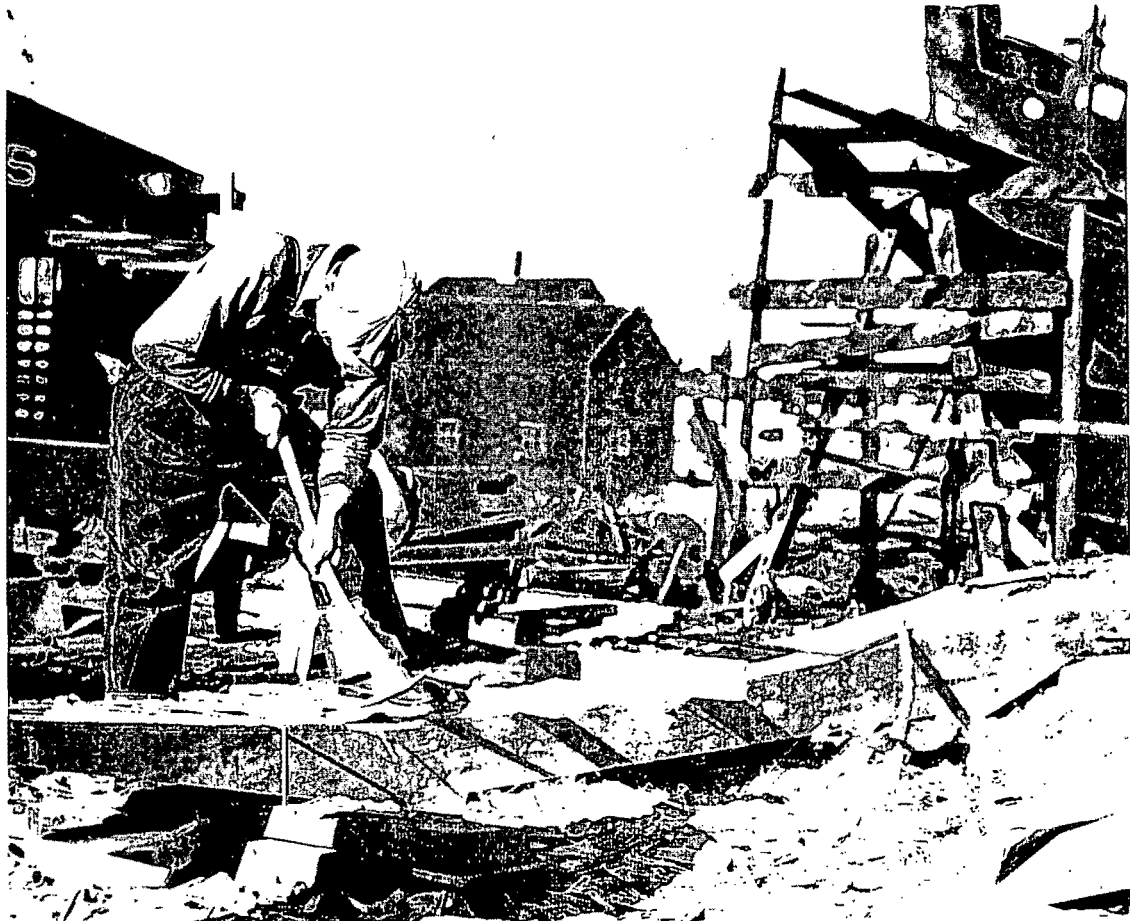
THREE-YEAR CORE CURRICULUM "FROM TREE TO SEA"

	SEMESTER-1	SEMESTER-2
FIRST YEAR	<p>FORESTRY - species identification, wood characteristics, new growth management.</p> <p>LUMBERING & MILLING</p> <p>STOCKROOM MANAGEMENT</p>	<p>BOATBUILDING 1 - loft and build 2 wherries, dories, or other simple boat.</p> <p>FUNDAMENTAL ENGINEERING</p>
SECOND YEAR	<p>BOATBUILDING 2 - loft and build in production series of complex open rowboats or canoes</p> <p>TOOL & PATTERN MAKING</p> <p>BUSINESS FUNDAMENTALS</p>	<p>YACHT DESIGN 1</p> <p>HALF-HULL MODEL MAKING</p> <p>ACCOUNTING FUNDAMENTALS</p> <p>TEACHING - students must teach the A/A, Col., and C/R level courses</p>
THIRD YEAR	<p>[INTERNSHIP IN INDUSTRY]</p> <p>YACHT DESIGN 2</p> <p>FOUNDRY WORK</p> <p>MARKETING FUNDAMENTALS</p>	<p>[INTERNSHIP IN INDUSTRY]</p> <p>BOATBUILDING 3 students will build a 25-35 ft. sailing yacht.</p> <p>SAILING & SEAMANSHIP</p>

* Ancillary course requirements and GED must be completed before entering into the second semester of the second year.

Requisite courses will be made available nightly and through the summer through corroboration with the University of Maryland, other affiliated schools, and qualified elders from the community whose livelihood and expertise lies in teaching the relevant subjects. REQUISITE ANCILLARY COURSES INCLUDE: American Red Cross First Aid, CPR, and basic swimming; college entry level ability in communication skills both oral and written, applied mathematics, applied sciences, arts and history.

* Certain lectures, seminars, and field trips will be required from an ongoing yearly program to be selected on the basis of both subject matter and timeliness.



FIRST YEAR: FIRST SEMESTER AT THE GARDNER SCHOOL

FORESTRY: To be lead by the State of Maryland Department of Natural Resources, and the Anne Arundel County Forest Conservancy. Course load designed to blend classroom with fieldwork; includes, but is not limited to:

- species characteristics and identification
- propagation requirements by class
- environmental impact
- new growth management
- the characteristics of various relevant species of wood in its growth habitat and its ecologically acceptable use
- replanting equal numbers of like conifers and deciduous trees as used in the boatbuilding courses

LUMBERING & MILLING:

- to be led by a qualified boatwright instructor, and qualified elders from the community whose trade and expertise lies in the selection, felling, logging, sawing and milling of trees.
- students will fell, log, transport, saw, mill, and stack for drying all raw material required by the boatbuilding courses
- introductory classroom study to cover safety precautions and equipment, types and characteristics of requisite tools and machinery, and the proper care and handling of green lumber

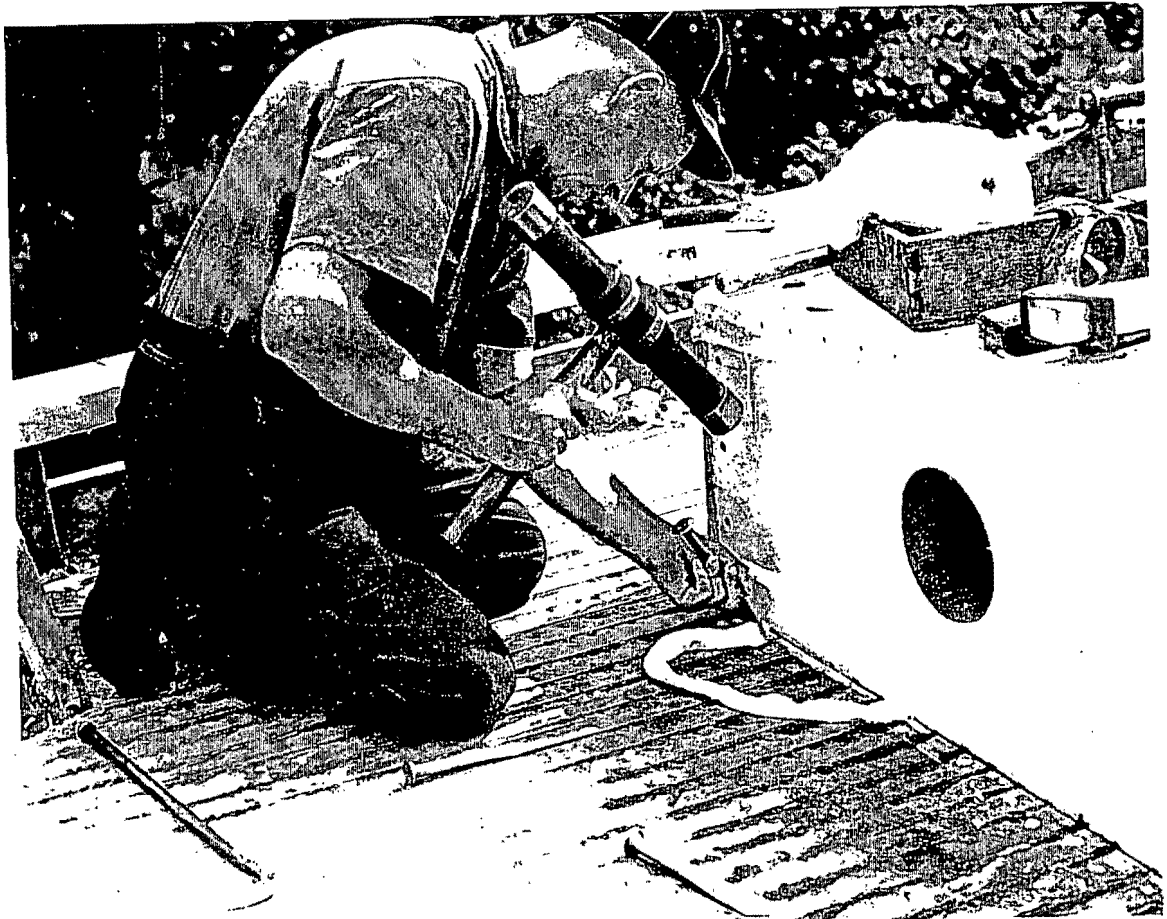
STOCKROOM MANAGEMENT:

- to be led by a qualified stockroom manager and elders from the community whose trade and expertise lies in the ordering and distribution of marine supplies.
- students will handle all aspects of identifying source, ordering, receiving, housing, and distribution of all materials required by the boatbuilding courses.
- introductory classroom study to cover the requisite communication, mathematical, and state-of-the-art computer skills.

FIRST YEAR - SECOND SEMESTER

BOATBUILDING I:

- to be led by qualified boatwright instructor
- students will loft, set-up, frame, plank, and finish out two wherries (or other relatively simple boat)
- Introductory classroom study to explore other shapes, materials, and methods of construction; safety precautions and procedures



- operation and use of requisite tools and machinery
- requisite courses in communication and mathematical skills

FUNDAMENTAL ENGINEERING:

- to be taught by Kaufman Design Associates, Naval Architects and Marine Engineers, Annapolis, Maryland
- classroom study to explore the fundamentals of engineering as applied to hull structure and integrity
- requisite courses in communication and mathematical skills

SECOND YEAR: FIRST SEMESTER

BOATBUILDING II:

- to be led by a qualified boatwright instructor
- students will loft, set-up, and build in production a series of Whitehall pulling boats (or other relatively complex types)
- introductory classroom study to explore other shapes, materials, and methods of construction; safety precautions and procedures
- operation and use of requisite tools and machinery; the compiling of a bill of materials; and procurement and administration of supplies.

TOOL & PATTERN MAKING:

- to be led by a qualified boatwright instructor and qualified elders from the community whose trade and expertise lies in the construction and fashioning of tools, and patterns for sand castings
- students will make a variety of hand tools requisite to boatbuilding for their personal kit; and various patterns for bronze castings required by the boats being built in the boatbuilding courses
- introductory classroom study to cover safety precautions and procedures: operation and use of requisite tools and machinery
- introductory lessons on the procedures of sand casting bronze hardware.

BUSINESS FUNDAMENTALS:

- to be led by graduate-level students from the University of Maryland, and qualified elders from the community whose livelihood and expertise lies in the relevant business practices of today's marketplace
- classroom study to cover the fundamentals of business structure and business law; and requisite courses in communication and mathematical skills.

SECOND YEAR - SECOND SEMESTER

YACHT DESIGN I:

- to be led by Kaufman Design Associates, Naval Architects and Marine Engineers
- classroom study to cover practical, theoretical, and applied mechanics; lines plans; drafting and lofting; and to introduce structural design.

HALF-HULL MODEL MAKING:

- to be led by a qualified boatwright instructor and qualified elders from the community whose trade and expertise lies in the fashioning and function of half-hull models
- students will be introduced to form & function through the centuries old practice of designing hull shape by fashioning to scale a model of half the hull.

ACCOUNTING FUNDAMENTALS:

- to be led by qualified graduate level students from the University of Maryland and qualified elders from the community whose expertise lies in the relevant business practices of today's market
- classroom study to cover all aspects of accounting and state-of-the-art computer bookkeeping systems.

STUDENT TEACHING

- To be led by a qualified boatwright instructor
- students will teach the courses offered at the collegiate, adult/amateur, and community/recreational levels
- these courses will be offered at night, on long weekends, and throughout the summer.

THIRD YEAR - FIRST SEMESTER

INTERNSHIP: In the third year students must complete a two-week internship in the industry.

YACHT DESIGN II:

- to be led by Kaufman Design Associates, Naval Architects and Marine Engineers
- classroom and in-the-field study to cover structural design; arrangements, equipment, and systems; form and function, selection and design; computer applications to design; and marine surveying
- in collaboration with their boatwright instructor students must design or identify and select a yacht between twenty and forty feet which they will build with conventional wood construction techniques during their final semester
- students must produce a Bill of Materials, Projected Cost Analysis, Evaluated Sales Price, and before the end of the semester, take delivery of all material required in the construction of said yacht.

FOUNDRY WORK:

- to be led by a qualified foundry operator and qualified elders from the community whose livelihood and expertise lies in the operation of a sand casting foundry and in machining the rough castings
- students will pack, pour, machine, and finish all the bronze hardware required by the boatbuilding courses
- introductory classroom study to cover safety precautions and procedures, operation and use of requisite tools and machinery, and relevant chemistry and metallurgy

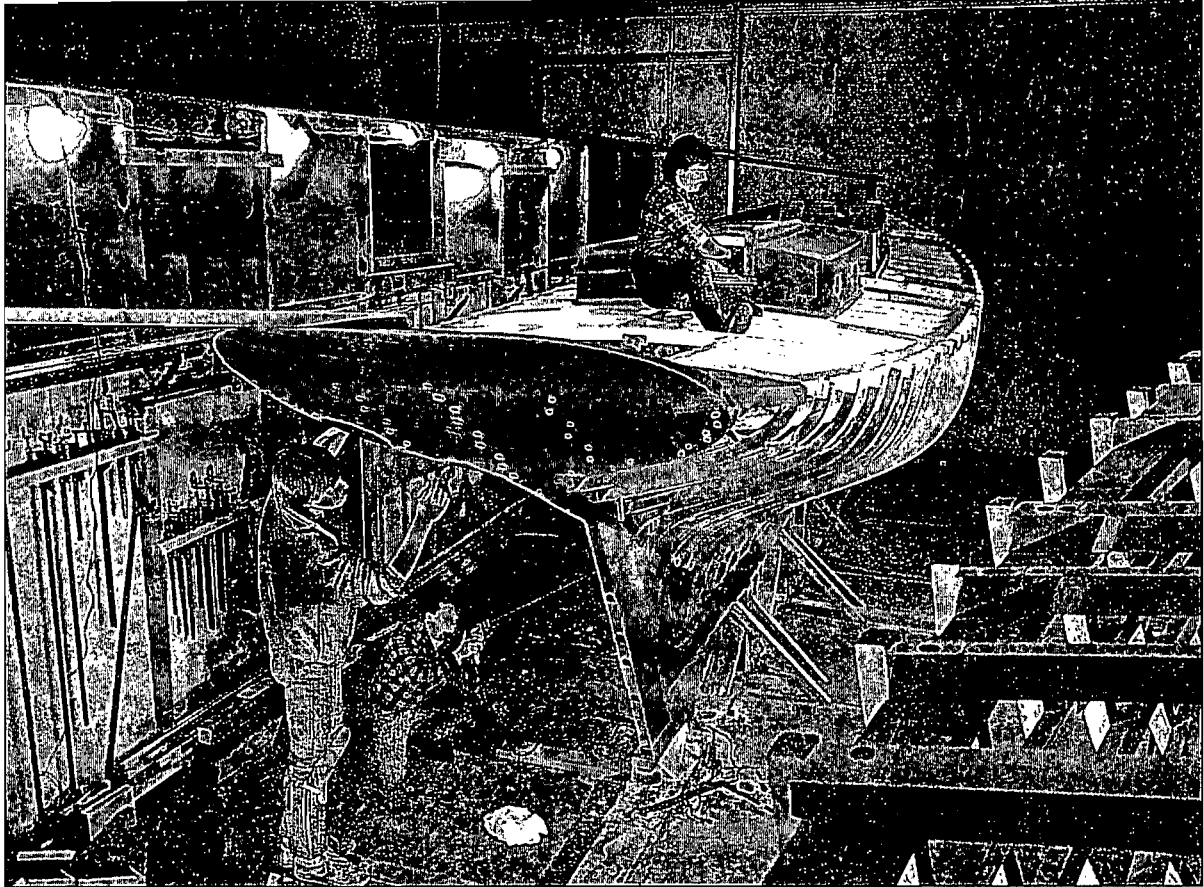
MARKETING FUNDAMENTALS: (refer to the color photo after title page)

- to be led by qualified graduate level students from the University of Maryland and other corroborating schools of marketing
- classroom and in-the-field study to cover all aspects of marketing from conceptual to execution
- students must successfully market (fleet or individual) the boats built in the boatbuilding courses, and one of the many sellable products created at the Lyceum. Examples include but are not limited to: bronze marine hardware; boatbuilding lumber; any of the various course offerings, lecture series, and seminar trips; livery activities and estuarium programs.

THIRD YEAR - SECOND SEMESTER

BOATBUILDING III :

- to be led by a qualified boatwright instructor
- students must loft, set-up, frame, plank, deck, and finish out the yacht selected and prepared for in the previous semester.



Traditional wooden yacht typical of Gardner school 3rd year course requirement

SAILING & SEAMANSHIP:

- to be administered by qualified Livery Instructors and qualified elders from the community whose expertise derives from their many years of life on the water
- students must achieve **certificates of competence** in sailing and in seamanship. Standards for the course curriculum and practical examination /certificate of competence program to be set in corroboration with and to be recognized by the U.S.Coast Guard, and the American Boat and Yacht Council.

LECTURE & SEMINAR SERIES:

Topics covered in this series would include but would not be limited to subject matter pertinent to the core curriculum and targeted to broaden the horizons of the three-year core students. The public will be encouraged to attend and participate in the lectures. These lectures and colloquia have to be marketed well, or else television and video will continue in its winning ways.

ACCREDITATION:

Endorsement and accreditation will be pursued forthright and achieved as early as possible from the following : Maryland State Board of Higher Education, Veterans Administration, American Boat and Yacht Council, National Marine Manufacturers Association, Society of Naval Architects and Marine Engineers, U.S. Coast Guard, American Sail Training Association, Society for Marine Technology, the Marine Trades Association of Maryland

STUDENT BODY

Eligibility: Students must be sixteen years or older and possess demonstrated secondary-education-level skills in communication (reading, oral and written), science, mathematics, geography, history, social studies and art. Students must successfully complete the process of filtration specifically designed to verify those requisite skills; measure degree of determination, will-power, vision, and compatibility; and affirm their commitment to what is, admittedly, a rigorous three-year course of applied learning. Students must sign letter of commitment to maintain a drug free environment to maintain their good standing at the Lyceum.

Eligibility for admission to the Lyceum is in no way affected by race, sex, religious, or ethnic background.

Demographics and Geographics: Except where programs have been developed to satisfy specific educational needs (as in the collegiate level courses), or are targeted to a more local population because of time restraints (as in the nightly meetings at the adult/amateur level) student participation will be sought from all ages from age sixteen, all socio-economic backgrounds, and from across the entire United States.

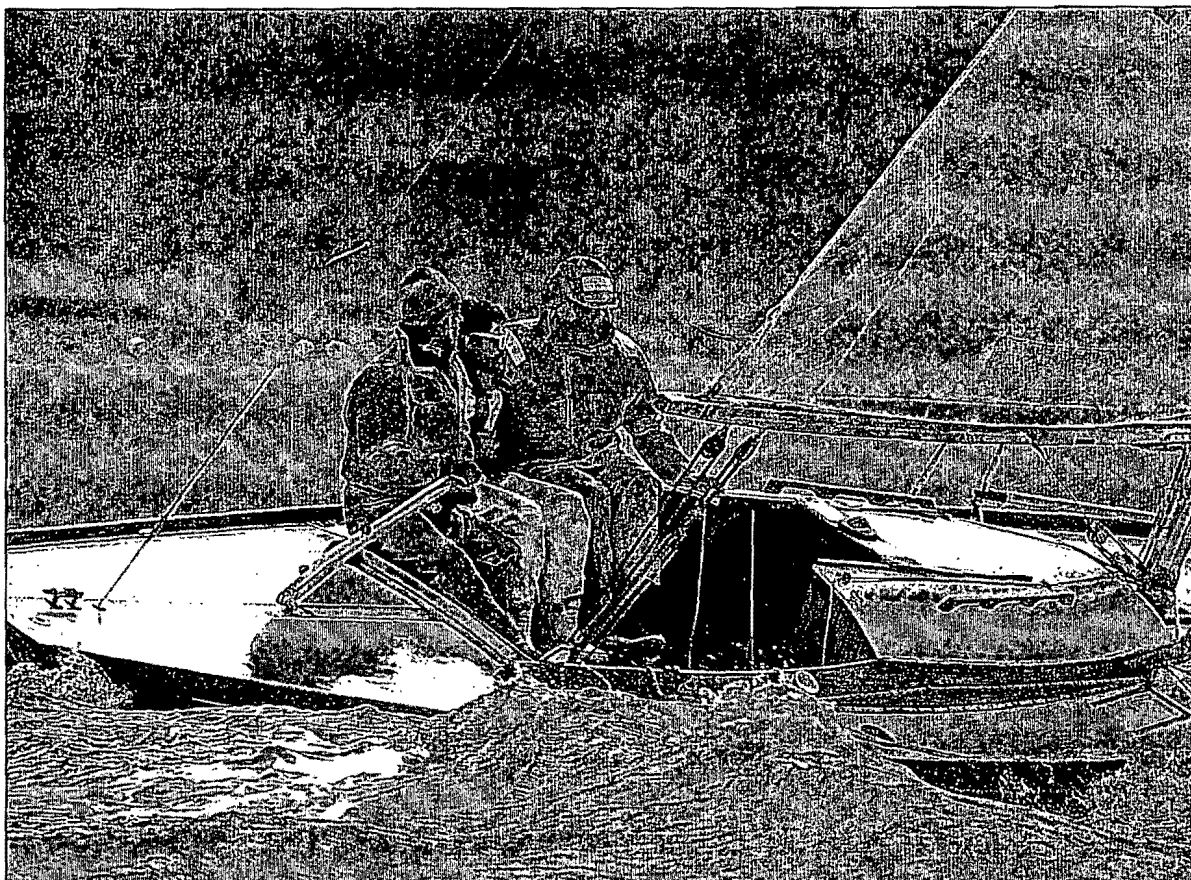
FILTRATION SYSTEM: Each Spring, prospective Lyceum students must complete a three-day evaluation course which will use both classroom testing and "outward bound" type challenges to determine level of educational skills and a character evaluation. This evaluation/filtration protocol will be produced and implemented in corroboration with experts in the field of conventional testing and in the area of "outward bound" character and commitment analysis. Final decision on admission to the Gardner School will be made by the admissions board of science, academic and trade professionals.

EXCHANGE PROGRAMS: A close collaborative relationship with other schools throughout this country, Canada, Bermuda, and abroad will be pursued forthright to open avenues of exchange for both incoming and outgoing students. A simple evaluation course would be required to accurately place exchange students within the three-year curriculum.

FINANCIAL AID: To be made available through a close-knit collaborative relationship between public foundations, relevant government programs and corporate sponsorship.

2. THE LYCEUM LIVERY: A viable boat livery, operating as a critical integrating component on the shore of the Lyceum site serves several unique functions:

- the livery will consist of twenty-five to thirty-five boats selected from America's extensive and diverse small craft heritage;
- they will be built as replicas of older types by the students in the boatbuilding courses, or restored in special courses covering boat and yacht restoration;
- will be headed by one of this country's foremost maritime authorities;
- will serve as an integral docent mechanism for Lyceum students;
- the boats will be rented to the public or in some cases operated by a qualified captain taking both recreational sailing trips and educational/research trips;
- the livery will create unique family-oriented, maritime linkages in tourism and trade for Maryland;
- requisite levels of skill will be given each boat type and corresponding instruction will be available; rowing, sailing, and classic powerboat clubs will be encouraged;
- recapturing some of the Chesapeake's rich maritime history, this unique livery will once again catalyze festivals, gatherings, and other gala events;



The Livery program will combine classroom study with seetime and result in certificates of competence being awarded upon the successful completion of a practical examination.

- the livery provides a coherent response to the national concern for escalating safety crisis on this country's waterways; at the core of the livery is an educational initiative designed to make safe boathandling and good sense on the water easily obtained and popularly sought;
- the program will be developed corroboratively with the U.S. Coast Guard, the American Boat and Yacht Council, the American Sail Training Association, and with consultation from the Royal Yachting Association, U.K.;
- the program will be graduated into several levels from small powerboat inland waterways to offshore yacht master and ocean navigation; these certificates will be recognized by the U.S. Coast Guard;
- the Lyceum Livery will provide a sustained academic, training and cultural maritime interface with fresh-water and marine communities throughout the North American continent

3. THE ESTUARIUM

This estuarium would be dedicated to helping others celebrate life on, in and around the Chesapeake. It should be a place to touch and explore the Bay in a uniquely personal way. There will be tanks of both freshwater and saltwater fish and other marine fauna to view up close and a touch tank where visitors could come into direct contact with Bay creatures. There would be a variety of "hands-on" exhibits to include, but not limited to, wetlands demonstrations, water salinity experiments, tidal tank and tables, exhibits on the life and harvesting technology of the Chesapeake watermen, the food-chain and the location and effects of point-source and non-point-source pollution within the watershed. There could also be an audio-visual display to simulate sailing on the Chesapeake or to acquaint the visitor with the density of birdlife of the Bay region.

This estuarium would be an ideal field trip destination for the school systems both within and outside the region. The estuarium's exhibits will be highly interactive and will interface with the majority of ongoing science curricula in the K through 12 student age group. Additionally, school age students could be directly involved with the creation of the exhibits either during the school year or as part of a summer program at the Lyceum. These students could also be trained as docents and could serve as guides to the exhibits for visitors. Additional Estuarium functions:

- The Estuarium will operate a fee-based summer program featuring two-week, Monday through Friday sessions, which would introduce students to life in and on the Chesapeake watershed by way of boat trips and field experiential learning. The focus of the summer program would be to have students recognize the interdependence of all life within the watershed and to encourage an understanding of its fragility. Summer students will also be involved in an outreach program of their own design to raise the environmental consciousness of the community.
- For the purpose of addressing the broadening concern of young students (age groups K through 8) who either enter a daycare program after school hours or return to an empty house, a sliding scale, fee-based program called **Latchkey Learning** will be instituted at the Estuarium during the traditional school year. Instead of tolerating a "babysitting" protocol until their parents return from work, the **Latchkey Learning** students will come to the Estuarium and participate in the preparation and maintenance of the Estuarium exhibits with Estuarium staff and volunteers. The **Latchkey Learning** program will be highly individualized and tailored to the interests of the prospective students. Initially, this program will operate two days per week with a five day per week potential.

- The Estuarium will hold a series of Saturday seminars which will encourage public attendance and participation. Topics will cover a broad range of catalytic topics dealing with the watershed, historical and contemporary, i.e., current studies on oysters or rockfish populations; the costs of ecological insensitivity; geological changes in the Bay or advances in mollusk aquaculture.
- The Estuarium will also keep scheduled hours of fee-based operation when the center will be open to the public at-large. This will be a time when families could visit the Estuarium in an unstructured atmosphere. Visitors would be able to interact with the exhibits at their leisure and would have the benefit of docents (from the volunteer corps and local middle and high school docent trainees) who will explain the nuances of the exhibits, as well as the entire Lyceum compound.

The initial Estuarium exhibits will be divided into two rooms. The first room would be called the Aquatic Experiential Learning Lab and would contain various tanks of species common to the watershed. Along one of the Lab's walls would be freshwater habitat tanks which would serve as homes for many of the fish and animals found in the ponds and streams which feed the Chesapeake Bay. One corner of the room would house a large circular "touch tank" where visitors could actually hold a watershed animal in their hands, such as a blue or horseshoe crab or mollusk. A docent will be assigned to this tank to answer questions. The Estuarium mesocosm of the middle Chesapeake would be located on the opposite side of the room. This closed-loop, flora and fauna marine life system uses a large clear marine tank with controlled tidal action and a live algae filter to naturally recycle waste products and water and provide constant nutrients at the same time. The mesocosm was developed by Dr. Walter Adey of the Smithsonian Institution.

The second room would house the Interactive Exhibition Hall - an aggregate of hands-on experiential learning stations. Each of these stations will serve a double function in the learning process. The person who interacts with the station will gain knowledge in a uniquely personal way. The person who develops the exhibit will have a chance to use the skills taught in school as well as hone his/her own problem-solving skills. Each exhibit will grow from an inquiry or interest on the part of a student. The student will then research that interest and write up his/her findings. Then, the student will develop an exhibit in such a way that another person will gain knowledge by some form of interactive participation with the exhibit. Finally, the student will serve as a docent and be available to discuss his/her area of interest with the public. The exhibits in the Hall will change periodically to insure a continuation of the catalytic learning process. Exhibition Hall exhibits could include:

- games demonstrating nautical navigation
- measuring water salinity/dissolved oxygen and their impacts
- critical functions of wetlands
- physical demonstration of impacts of dumping wastes and toxins within the watershed
- geological/topographical changes within the watershed
- fossil deposition within the Chesapeake
- model boat construction
- the Chesapeake's food chain
- microscopic life within the watershed, viewed through a microscope and displayed on a large monitor
- tides and wave action
- life through the eyes of a blue crab
- a wheelhouse simulator where students would experience piloting a boat through a storm or through a narrow channel. Experience would be enhanced through video monitors which would replace windows in the wheelhouse.

The Estuarium would house a classroom, a small office, a workspace and a sick bay holding area for additional animals. Initially, the Estuarium would need no more than two permanent staff members. An additional staff of volunteers would be recruited and coordinated to support the maintenance of the Estuarium and to supplement teaching staff. Teaching staff and seminar leaders would be hired on a short-term-contract basis to meet the needs and interests of the students.

The Learning Modules: Primary/secondary student day classes.

These instructional modules are another function of the Estuarium and create strong linkages between the Lyceum and the regional school systems. The modules are designed to serve all K through 12 students at different times of the school year. During the traditional school year, each group of visiting students will have its own school science teacher guiding them through the Estuarium. Each participating school will be required to send their science teacher pool for a half-day of training prior to school visits. These modules are designed to serve as interactive learning tools for the K through 12 student population. These learning sessions will be of relatively short duration (1 to 3 hours) and, where practicable, presented within the existing relevant material for a particular course. Wherever practicable, these courses will be presented in an experiential laboratory protocol:

- interactive science laboratory and in-Bay curricula
- modules taught by Maryland certified teaching staff and science professionals
- wet lab facilities
- boatwright shop participation
- "from tree to sea" programs
- on-line maritime forum for interfacing with active marine research scientists in the region, e.g., Biological Laboratory in Solomons, MD, the Smithsonian Environmental Research Center on the Rhode River, Edgewater, MD, and the University of Maryland research group at both the Wye River and Horn Point complexes on the Eastern Shore.

4. THE LYCEUM MUSEUM, LIBRARY AND ADMINISTRATION

This is the most "high tech" structure on the Lyceum site. It will house the Lyceum Museum, Library and Administration. This structure will serve as the communications nerve center for the entire center. All office, publication, business machine, computer and communication equipment will be located here. All Lyceum administrative and development initiatives will be generated here. All weekly, monthly, quarterly and annual accounting (accounts receivable, accounts payable and payroll) will be handled on a contractual basis by Franklin Accounting, Deale, Maryland.

THE LYCEUM MUSEUM

Museum Curator (Position Description)

The first 9-12 months will be needed to establish the library and initiate the boat plans collection and also to arrange for its documentation and physical preservation.

Over the next two to three years, contact members of the Council of American Maritime Museums, National Maritime Historical Society and The International Congress of Maritime Museums to establish a program of sharing boat plans through inter-museum loan or acquisition. A comprehensive listing of available boat plans will develop from this program. Establishing contact with persons or organizations who can contribute items to the collection or arrange for such donations, gifts or bequests will be pursued.

The Museum Curator will work closely with other Lyceum staff members to build an integrated library and boat plans collection. He/she will be responsible for building, interpreting, maintaining, displaying, researching and publishing the small craft boat plans collection in addition to the administration of the budget, overseeing programs, collections and exhibits, co-coordinating the Summer Inter /Exchange Program and supervising a small staff. He/she will work closely with the educational staff, Lyceum students and the general public.

Considerations for the boat plan collection include:

Storage of boat plans - within the first year acquire print drawers and/or Solander boxes. Once the environmentally controlled area is established, boat plans acquisition can begin through donation, purchase and inter-museum loan.

Conservation - examination, preservation and cataloging of paper and wood objects.

Cataloging - computer equipment for general curatorial control over the boat plan collection in addition to development and publication of printed material from the Lyceum publication project. Data gathered for and used by students, researchers, as well as novice to advanced boat builders. Other museum collections will be accessed by modem, laser disk or hard copy. Collections to be networked will include but are not limited to Mystic Seaport, MIT, The Mariners Museum of Virginia, and The National Maritime Museum, Greenwich, England, and the Division of Transportation, National History Museum, Smithsonian Institution.

Exhibition of plans and half models - continual changing exhibits of vessel plans and related half models will be established in the museum area. Publication in conjunction with exhibitions will be considered as will exchange of material from other museums.

The Intern and Cross-Cultural Summer Exchange Programs

The Summer Intern and Cross-Cultural Exchange Programs will be developed and coordinated collaterally between the Museum curator, the Director of Development and the Lyceum Head. The multi-faceted benefits of this initiative are implicit in the title of the program. This intern/exchange initiative is a virtually complete win-win scenario for all involved.

- This component of the initiative creates the opportunity to bring in highly qualified and motivated undergraduate and graduate student interns to some applied, residential work with the Lyceum and its summer student body.
- They would be sponsored by their respective universities, Federal or State agencies (particularly, the U.S. Dept. of the Interior, NOAA, Education and EPA), or the newly established National Service Corps, the National Maritime Heritage Act or by private funding organizations.
- The Summer Program is also an opportunity to bring in some highly underserved and high risk young people to spend a short but significant time at the Lyceum.
- The Summer Program is also an opportunity to allow different groups of native Americans to spend time in one another's culture. For example, it has been proposed that in the summer of 1994 or 1995, the Lyceum work with the Inuit of Northwest Alaska or N.W. Territories, Canada, to arrange an exchange with some of southern Maryland's Piscataway young people.

The Lyceum Library

A library will be developed to support the boat building program in addition to being available to students, researchers of all levels and to the general public. Books and periodicals will be purchased, donations sought out and accepted to this end using other major maritime collections as a model (i.e., Mystic Seaport, which has a 50,000 volume library of books and periodicals, 500,000 manuscripts, 7,000 charts and maps and 60,000 ships plans).

The library will establish research fields in vessel documentation. Special emphasis will be placed on historical maritime teaching texts and primary documentation on the evolution of commercial trade vessels operating in the Chesapeake/Delmarva region.

Museum Aid (Position Description)

This position could easily be established as an internship for a library science student. The library/museum aid involves the following library functions: Assist the Museum Curator in establishing and cataloging books and periodical collection. Other responsibilities include support of computers and database; maintaining system for accessing, cataloging and circulation of collection; the preparation of library material; care of shelves, files and equipment; circulation of work such as registering borrowers, explaining lending rules, reserving books for library patrons; acquisitions work such as ordering publication, preparation of book lists, routine correspondence; cataloging work such as making additions to catalog records; processing added copied and new editions; answering factual or directional questions involving the use of standard reference tools and specific, readily available sources. The aid will also take a primary role in organizing the Museum volunteers.

Oral History Project

A program for collecting the past from the people who both lived in it and made it, with our emphasis on work in the Chesapeake Bay and other coastal areas of the U.S. We will find and record through audio and/or video tape the personal histories related to the maritime industries of wooden boat building. A written copy, properly transcribed, edited, reviewed, retyped and indexed, allows the original recording to be preserved and will make the material widely available and user friendly. Access to the information will be through our library. The photo below demonstrates the richness of the culture history which we are at risk losing.

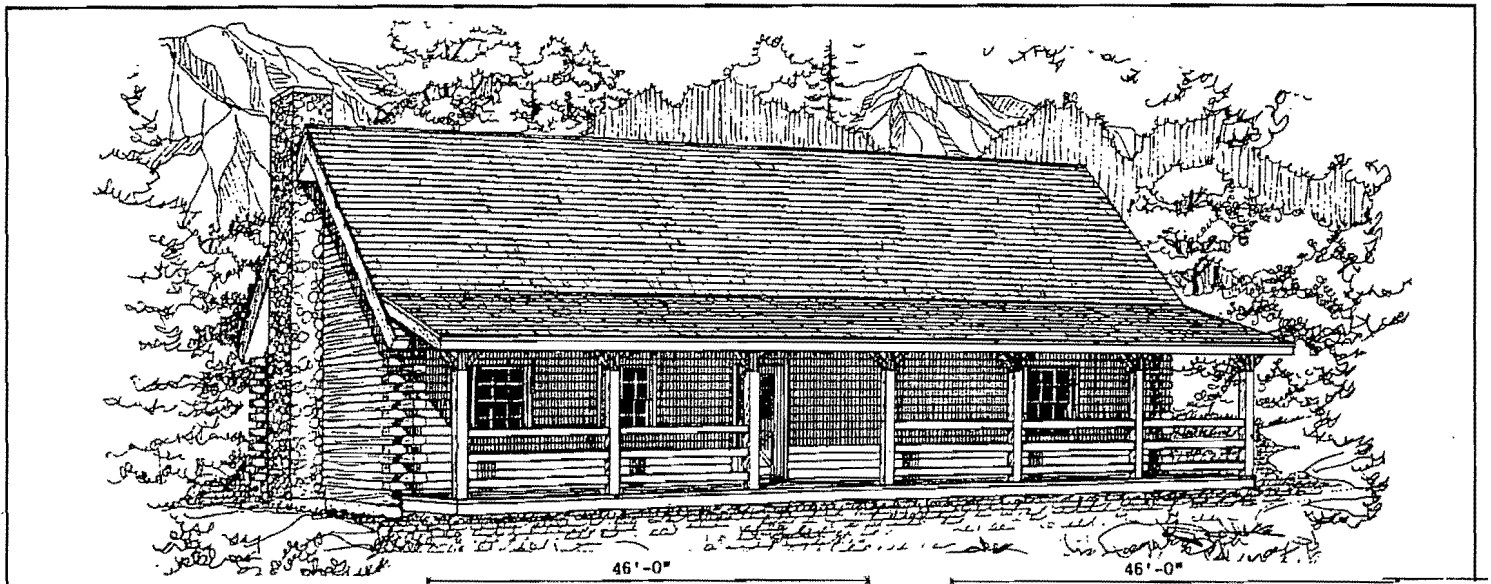


Publications Project

A publication project will be undertaken by the Lyceum, as an outgrowth of the Museum. The publications will be a record of Lyceum projects through written documents and video in addition to research and professional writing resulting from study of the collection itself. The publication project will work in close coordination with the oral history program.

5. THE LYCEUM RESIDENCES AND CAFETERIA

One of the distinctive operational features of the Lyceum site will be its fee-based residence component, including a small cafeteria. In addition to providing a small dining capability on site for the Lyceum's students and staff and visitors, the residence cabins, in concert with the Livery and Estuarium programs, will provide a closed-loop service and activity capability. The site's maritime location, plus the distinct flavor of the Lyceum's historical/ contemporary blend, will hold strong appeal for our burgeoning tourist population.



After an extensive evaluation of alternatives, the cabin compound format was selected for the Lyceum's residences:

- as an institution of higher learning, the Lyceum students merit an environment which stimulates a sense of focus and isolation from the endless inventory of conventional distractions, i.e., television will not be a feature in the cabin compound; primary traffic will be pedestrian; footpaths replace roadways within the Lyceum site;
- among its other functions, the Lyceum will provide its students, staff and visitors with a subtle appreciation for a more bucolic and "Thoreauian" sense of presence, absent the assault from the legion of consumer clutter, e.g., leaf blowers, weed wackers and jet skis;

- the Lyceum's boatwright program requires three academic years to complete; for reasons of comity and solidarity, a distinct residence space is appropriate for each of the three class levels to accommodate students who will be in residence on site; the residence compound will be set off from the site's main traffic flow;
- a residence cabin advisor will be assigned to each of the Lyceum student cabins; the advisor positions will be part-time slots filled by graduate students who will take the positions in return for room and board;
- each cabin will have a co-gender capability and be wheelchair accessible;
- initial cabin design calls for three student cabins and three visitor "hostel" cabins which will accommodate overnight individual and family Lyceum visitors, as well as student groups -- many of whom will be overnight Livery visitors; each cabin will be @ 1500 sq. ft.;
- each cabin will have four, secure rooms, each with two sets of wooden frame bunk beds, desk and limited clothes storage space for four; these are student rooms, not the Hyatt; each cabin will have an small vestibule and one full-service bath facility and auxillary passive solar heating;
- each Lyceum student will be required to provide his/her own bedding and is responsible for maintaining a clean area within the cabin;
- a standardized room-and-board fee will be established for the Lyceum students, as well as for guests at the hostel cabins;
- the cabins' exterior structure will all be constructed from native log (1/2 log construction) or timber-frame construction;
- the cafeteria will have the same overall physical dimensions and exterior motif as the residence cabins; it will be centrally located in the residence compound; it will be maintained by a small kitchen staff and operate from early morning to early evening depending on the seasonal traffic flow at the Lyceum; the warm weather season's traffic flow will generate limited part-time employment for local high school students to meet the increased visitor demands on the cafeteria facility.

PHILOSOPHY

The Draketail Maritime Lyceum is a proposed philosophical and physical plant outgrowth of the original Draketail Project in non-traditional learning - the central fuel cell of the Draketail Maritime Lyceum is found in the dynamics of organic solidarity, which create significant, real world linkages between students, their support network, their communities, model professionals and real-world avenues for earned, high quality careers.

A foundation philosophical plank of the Draketail Lyceum is that there is *no* substitute for genuine learning. It is the singular forecast for a high self-image and a quality life with substantive contributions.

Within the Draketail Lyceum, support, cooperation and encouragement will wear much more durably than pressure and competition. It is our belief that large segments of our population constitute enormous, untapped resources and competencies. Time and pace adjustments must be made in order to unlock these resources. As we take Lyceum students "from tree to sea", fundamental time, pace and cultural ecology adjustments will be made. Over time, the strains of Mozart and confident expression will be the norm under the roof of the Lyceum's post & beam boatshed.

The Draketail Maritime Lyceum holds that the young people, especially fortunate enough to find themselves growing up anywhere along the coastline or waterways of this country, are deserving of every reasonable opportunity to understand, in the short and long view of things, what they can do to use these finite resources productively, and at the same time hold them sacrosanct. They must be reasonably led to want to comprehend the huge inventory of values and knowledge which our marine and freshwater resources and their people have to offer them. The students of the Lyceum must assume a leadership role in drawing a line in the sand. Further, it is the responsibility of all involved in the Draketail Maritime Lyceum to work towards an ecologically viable future for the Chesapeake Bay watershed, and towards the reality that today's and tomorrow's children will be adequately prepared to play a central and constructive stewardship role in that future.

A century ago, a visionary Maryland entrepreneur, Jacob Tome, looked out over the Susquehanna River above the massive granite cliffs of Port Deposit, Maryland, and made a lifetime commitment to provide the finest learning opportunities to the children and families of the area who embraced the high quality work ethic of the time. His nurturing of inquiry and his rigorous standard of excellence is a beacon across the water to the Lyceum and all of its students of the future.

Appendix A

DRAKETAILE LYCEUM PROJECT
Cash Flow Forecast for the Years 1994, 1995 and 1996

SOURCES OF CASH	1994	1995	1996
Federal Grants:			
Capital Projects	\$2,871,320	\$500,000	0
Educational Programs	886,000	1,000,000	500,000
1994 Start-Up Costs	425,000	0	0
Secondary School Fees	0	\$25,000	\$49,000
Livery Instruction	0	\$15,000	\$30,000
 SALES			
Boats and Marine Hardware	0	\$50,000	\$200,000
Livery Rentals	0	\$40,000	\$85,000
Student Tuitions	\$171,000	\$392,000	\$513,000
Student Room and Board	108,000	216,000	324,000
Private Contributions	<u>35,000</u>	<u>75,000</u>	<u>200,000</u>
 TOTAL SOURCES OF CASH	 \$4,496,320	 \$2,313,000	 \$1,901,000
 CASH EXPENDITURES			
Capital Projects:			
Museum, Library, Administration	\$1,365,120	\$363,000	0
Livery Administration Building	\$32,000	0	0
Livery Maintenance Building	\$108,000	0	\$210,000
(6) Residence Cabins	\$450,000	0	\$360,000
Estuarium	\$360,000	\$500,000	0
Gardner Boatwright Facility	\$420,000	0	\$61,000
Lumber Sheds	\$19,200	0	0
Information/Security Building	\$18,000	0	0
Cafeteria	\$75,000	0	\$40,000
Foundry/Machine Shops	\$24,000	0	\$30,000
Total Capital Projects	\$2,871,520	\$863,000	\$651,000
1994 Start-Up Costs			
(Machinery, Tools, Lumber)	\$375,200	0	0
Cafeteria Equipment	50,000	0	0
Total Start-Up Costs	\$425,000	0	0
Educational Programs	\$886,000	\$1,250,000	\$975,000
Fixed Administrative Costs	\$150,000	\$200,000	\$225,000
Architect's Fee	\$160,000	0	0
 TOTAL CASH EXPENDITURES:	 \$4,492,320	 \$2,313,000	 \$1,901,000

Appendix B

THE LYCEUM STAFF

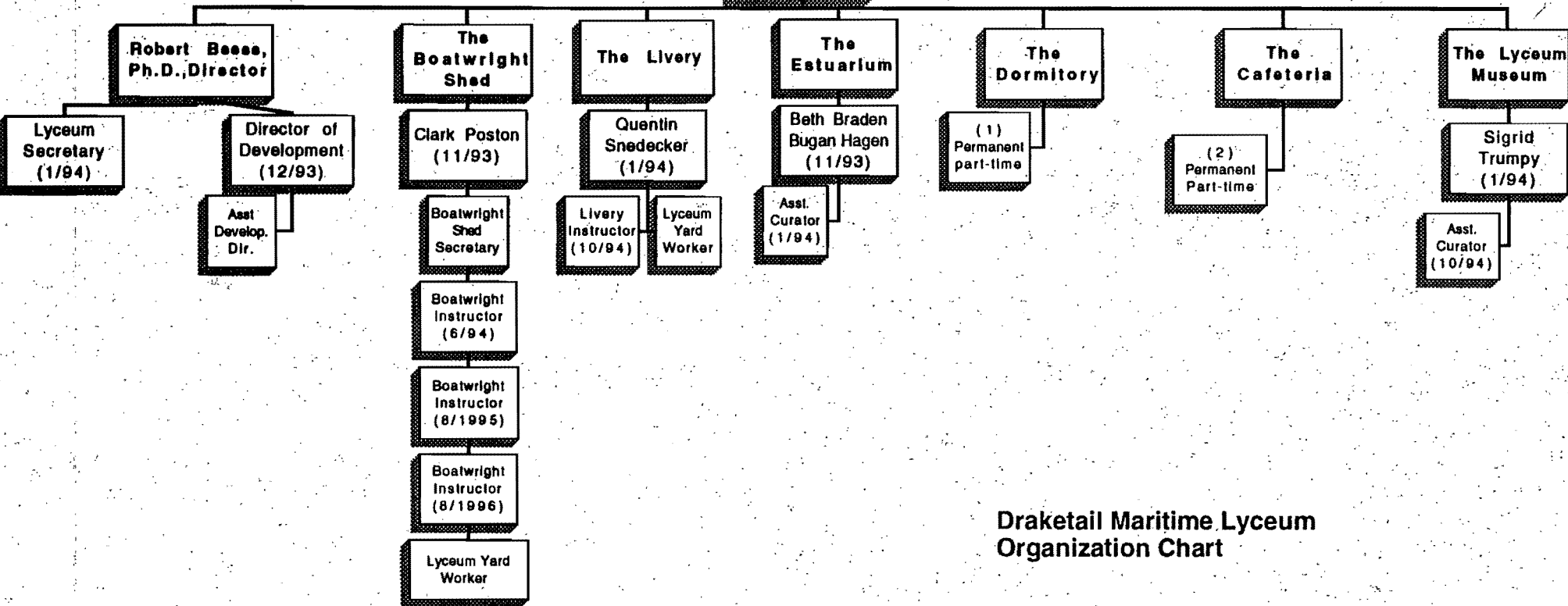
The staff are the leaders of the program. The success of the school will lie in the rigor of the curriculum and in maintaining a highly qualified and motivated leadership. The listing below outlines the baseline Lyceum staff, their recommended annual salaries and the consultants who have consulted on the initial development of the Lyceum.

Lyceum Director, Robert W. Besse, Ph.D.	65,000
Lyceum Secretary	30,000
Director of Development	40,000
Assistant Director of Development	30,000
Consultants:	
Schwarz Purcell, Architects	
John Gutting, Historical Landscape Architect	
Robert Morris, CPA	
Estuarium Director, Beth Braden Bagan Hagen	40,000
Estuarium Assistant	25,000
The Gardner School Director, Clark O. Poston	65,000
Gardner School Secretary	30,000
Assistant	30,000
First Instructor	40,000
Second Instructor	35,000
Third Instructor	35,000
Foundry Operator	30,000
Lyceum Yard Worker	20,000
Stockroom Manager	30,000
Consultants:	
Kaufman Design, Inc.	40,000
Maryland Department of Natural Resources	
University of Maryland, graduate students	
Mr. Olin Stevens, N. A.	
Others to be identified	
The Livery Director, Quentin Snediker	65,000
First Instructor	25,000
Second Instructor	25,000
Maintenance Staff (3)	46,000
Boat Rental (3 – purser, 2 assistants)	25,000
Consultants:	
Tom Curliffe, RYA, U. K. (set-up fee)	20,000
American Boat and Yacht Council	
U. S. Coast Guard	
American Sail Training Association	

The Museum/Library Director, Sigrid Trumpy	45,000
Assistant	30,000
Consultants:	
Ann Bray (set-up fee)	20,000
Others to be identified	

Qualification: Instructors must have a minimum of six years experience as a master in their respective fields with at least four years experience teaching their trade at some level. Eligible applicants must complete a three-day evaluation seminar. New staff must complete a week-long training session prior to their first semester of classes.

**Draketall
Maritime
Lyceum**



**Draketall Maritime Lyceum
Organization Chart**

Appendix E

JOHN GARDNER

A Biographical Sketch

P6/b(6)

1931	Received B.S.
1932	Received Master's from Teachers College at Columbia
1940-1946	Worked at Graves Yacht yard, Marblehead, Mass.
1946-1948	Worked at Simms Bros., Dorchester, Mass.
1948-1969	Worked at Dion's Yacht Yard, Salem, Mass.
1951-Present	Technical Editor, <i>Maine Coast Fisherman</i> now published as <i>the National Fisherman</i> , ; published over 250 articles
1969-Present	Curator of Small Craft, Marine Historical Association, now known as Mystic Seaport Museum
1975	Organized Small Craft Curators Association
1976	Presented papers at Second Annual Museum Conference on Small Craft, The Mariner's Museum, Newport News, VA, now published by National Trust for Historic Preservation in <i>Wooden Shipbuilding & Small Craft Preservation</i>
1976	Organized the Traditional Small Craft Association in response to new U. S. Coast Guard regulations requiring floatation in open boats less than 20 feet in length

Other Publications:

Books: The Dory Book, International Marine Publishing Co., Camden, ME.

Building Classic Small Craft, International Marine Publishing Co., Camden, ME.

Building Classic Small Craft - Vol. II, Mystic Seaport Museum, Mystic, CN

Building Classic Small Craft - Vol. III, Mystic Seaport Museum, Mystic CN.

Articles:

Published in: Wooden Boat Magazine, Small Boat Journal, American Sportsman, Field & Stream, Outdoor Maine

Contributed to: *Time Life Series*, and *The Adirondack Guide-Boat*, by Kenneth and Helen Durant, International Marine Publishing Co., Camden, ME

With insatiable curiosity and conviction, John Gardner sought out, measured, and drew the plans for countless small craft in the '40's, '50's, and '60's. he corresponded with Kenneth and, later, Helen Durant, in an effort to determine the origins of the *Adirondack Guide Boat*, and, subsequently, helped bring their book to fruition. He was brought to Mystic to design and implement a small craft program of collection, preservation, replication and documentation, and education. John brought to light the important role American small craft played in the shaping of this country, and instigated the collections of many of the maritime museums across the continent.

Through his books, articles, lectures, and classes, he has inspired and provided the impetus for various new boatbuilding publications, boatbuilding schools and livery programs, boatbuilding shops, and innumerable home-built success stories across America and Canada, in Europe, Africa, New Zealand, and Australia

Unequivocally, John Gardner is the DEAN OF AMERICAN SMALL CRAFT.

ROBERT W. BESSE

P6/b(6)

Four years of teaching experience at the university level. Six years of combined fieldwork and laboratory experience in human ecology, transition subsistence economics, regional planning analysis, and resource development and management among native North American groups, particularly the Inupiat (Eskimo) of Northwestern Alaska. Four years of academic manuscript editing experience. Planned and implemented research projects. Analyzed and presented research findings at professional meetings.

Fifteen years of university education and experience drawing from the area of economics, demography, human ecology, geography, linguistics and anthropology. Work comfortably with deadlines and within an analytical framework. Have used interdisciplinary research concepts and assertively employed qualitative/quantitative methodologies. Field research in the low Arctic, primarily in northwest Alaska, on a seasonal basis for five years.

Have been involved with a variety of social science projects, with extensive experience in both the construct of, and field experience in, several social science domains, i.e., worked on the development of holistic learning modules in the physical and biotic environments for Inupiat high school students; have worked extensively with a broad range of EIS data focusing on the expanding threats to the Arctic ecosystem; was a sub-contractor data synthesizer for an Outer Continental Shelf (OCS) development project; worked on a housing/energy efficiency project in the Arctic; was an abstractor/indexer for the ERIC Clearinghouse.

I continue in my strong commitment to significantly contribute to human ecology research and pedagogy. Since the summer of 1990, I have been at the center of guiding the evolution of a community-based, non-traditional initiative of leading young adolescents and their families to the learning of the sciences on the Chesapeake Bay's western shore. This values-centered, intergenerational initiative is known as the **Draketail Maritime Project**, and is funded through competitive grants and donations. The Project's first two major accomplishments have been the original construction of a rare 1930's, 40' Chesapeake oyster boat as their research vessel and the acquisition of a building and wetlands acreage for the science lab. The **Draketail Project** was recently given extensive coverage in the *Washington Post* and *Baltimore Sun* and received air time on *Good Morning, America* and on *Fox Network News*, Washington, DC.

Clark Owen Poston

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Qualifications Summary

Five years master boatbuilder after six year apprenticeship. Taught boatbuilding for 10 years at vocational, college, and adult amateur levels. Logged over 19,500 sea miles as officer of the watch, navigator, or captain in North Atlantic, Mediterranean, and Caribbean waters. Hold British Certificate of Competence as Yachtmaster Offshore endorsed for sailing vessel with auxilliary engine up to 200 gross registered tons.

Employment Currently

Designed and implemented boatbuilding courses at St John's College, Annapolis, Maryland.

12/15/92-1/2/93

Captain, 52' yawl *Sadie* on passage Oriental, N.C. - Tortola, B.V.I. Entering Atlantic Ocean through Beaufort Inlet and continuing offshore to Tortola. Owner: World Charter Corp., Belfast, Maine.

8/92 - 11/92

Carpenter, rebuilding Eastport house built in 1880. Indoor and outdoor joinery, some new furniture. Owner: Mr. Jay Baldwin.

4/92 - 8/92

Joiner, built and installed new interior in 46' sailing yacht designed by Mr. C. W. Paine, built for Mr. Guy Erickson.

11/90 - 3/92

Head Shipwright, employed by Creole, Ltd. Restoration of 60' cutter rigged sailing yacht *Avel* designed by Charles E. Nicholson, built: Camper & Nicholson, 1896. Restoration site at Spencer Thetis Wharf, Cowes, Isle of Wight, England.

1/83 - 10/90

Owned and rebuilt 8 1/2 ton cutter rigged sailing yacht *Corineus* designed by Mr. Andrew Hepburn, built: George L. Chaison, 1937. Sailed all New England waters.

6/90 - 10/90

Captain, 72' yawl *Zorra* on day trips and coastal cruises around Martha's Vineyard. Owner: Zorra, Inc. c/o Gannon & Benjamin Marine Railway, Inc.

5/90

Navigator, 72' yawl *Zorra* on passage St. Martin, W.I. - Bermuda - Martha's Vineyard, MA. Owner: Zorra, Inc. c/o Gannon & Benjamin Marine Railway, Inc.

5/89 - 5/90

Master Boatwright, employed by Gannon & Benjamin Marine Railway, Inc. Built new boats from 10' to 36' designed by Mr. Nathaniel Benjamin. Rebuilt and repaired wide range of wooden vessels. Trained apprentices on the job.

1/83 - 5/89

Boat builder, employed by Mystic Seaport Museum. Built new boats in open exhibit shop. Documentation of specific boatbuilding methods used by various boatbuilders from across the country. This work involved measuring and drawing old boats, building replicas, oral histories, and publication. Taught boatbuilding with Mr. John Gardner, Dean of American Small Craft.

- 9/82 Officer of the Watch, 125' topsail schooner *Lindo* on passage Newport, R. I. - Chicago, Ill. via St. Lawrence River. Captain: Greg F. Birra.
- 7/82 - 8/82 First Mate / Navigator, 103' schooner *Puritan*, on passage Ft. Lauderdale, Fla. - Newport, R. I. (off-shore, coastal). Captain: Steve Jones.
- 9/80 - 5/82 First Mate, 103' schooner *Puritan*. Sailing North Atlantic, Mediterranean, and Carribean waters from Newport, R. I. - Porto Santo Stefano, Italy - Antigua, W. I. - Ft. Lauderdale, Fla. Captain: David T. Matzenick.
- 6/80 - 8/80 First Mate, 72' yawl *Cotton Blossom IV*. Sailing New England Coast. Captain: Richard Griffiths.
- 6/79 - 8/79 First Mate, 72' yawl *Cotton Blossom IV*. Sailing New England Coast. Captain: Richard Griffiths.
- 6/78 - 8/78 Deck Hand, 72' yawl *Cotton Blossom IV*. Sailing New England Coast. Captain: Richard Griffiths.

References

Captain Richard Griffiths
S/Y Rosalind
 Elizabeth City Shipyard
 Riverside Ave.
 Elizabeth City, N. C. 27909

Captain David T. Matzenik
 Fair Haven Farm
 Mail Service 626
 Pomona 4568
 Queensland
 Australia

Leo Pickens
 St. John's College
 Annapolis, Maryland
 (410) 626-2537

Mr. Ben Fuller
 Provost, The Artisans School
 P. O. Box 539W
 Rockport, Maine 04856

Mr. John Gardner
 Curator of Small Craft
 Mystic Seaport Museum
 Greenemanville Ave.
 Mystic, Ct. 06355

Mr. Barry Thomas
 Boat Shop
 Mystic Seaport Museum
 Greenemanville, Ave.
 Mystic, Ct. 06355

Mr. Nathaniel Benjamin
 Mr. Ross Gannon
 Gannon & Benjamin Marine Railway, Inc.
 P. O. Box 1095
 Vineyard Haven, MA. 02568

Mr. Harry Spencer
 Spencer Thetis Wharf, Ltd.
 Medina Road
 Cowes, Isle of Wight
 England

Captain John Bardon
 Master, *S/Y Creole*
 Apartado 12
 Andraitx
 Mallorca
 Balears
 Spain

QUENTIN T. SNEDIKER

P6/b(6)

EDUCATION B. S. State University of New York, Maritime College at Fort Schuyler, Bronx, New York, 1972.

Frank C. Munson Institute Summer Program, Graduate Studies in American Maritime History, Mystic, Connecticut, 1990-1991.

PROFESSIONAL LICENSURE U.S.C.G. License #652909, Master Near-Coastal, 100 Ton Auxiliary Sail and Motor, 3rd Mate Oceans.

EMPLOYMENT HISTORY

1993-Present Associate Director of Programs/Center for Education and Research, Chesapeake Bay Maritime Museum, St. Michaels, Maryland

- Program development revolving around traditional Chesapeake Bay sailing craft.

1989-1993 Supervisor of Vessel Maintenance, Mystic Seaport Museum, Mystic, Connecticut

- Implemented maintenance program of entire Museum watercraft collection, comprised of 430 "in-water" and "artifact" vessels. The collection consisted of vessels ranging from the 350 ton whaling bark *Charles W. Morgan*, to canoes.
- Hired, scheduled and coordinated the labor program for 9 full-time positions.
- Coordinated and managed the extensive shipyard volunteer program: 25 bi-weekly "gung-ho" volunteers, 60 bi-annual "pilots", and 10 daily and weekly volunteers.

SPECIAL PROJECTS

Live-Oak Acquisition, 1990-1991:

- Organized and coordinated with the South Carolinian municipal authorities and local landowners for the collection and delivery of downed live oak timber resulting from the destruction of Hurricane Hugo.

Morgan 150th Anniversary, 1991:

- Led Mystic Seaport Museum Shipyard efforts to historically fit-out the vessel as "ready for sea" as represented in the years 1906-1910.

Museum Strategic Planning Committee:

- Member of the Mystic Seaport Museum Committee organized to discuss and formulate the long-term planning for museum growth in the 21st Century.

Advisor, Schooner Inc.

- Advisor to the "Boat Committee" of Schooner Inc., sponsor of the non-profit educational vessel *Quinnipiac*, New Haven, Connecticut.

1982-1989

Captain, *Mystic Clipper*, Mystic, Connecticut.

- Responsible for daily operation, passenger safety and schedule compliance of 100 ton sailing passenger schooner with a certified passenger capacity of 120.
- Administrative duties included planning of schedule, purchasing of equipment and hiring of personnel.
- Coordinated and managed the maintenance and complete operational program of the vessel.
- Trained and managed 5 crew members each season.

1981-1983

Operations Director, Out of Mystic Schooner Cruises, Mystic, Connecticut.

- Operations director for complete construction from design to fit-out of the 100 gross ton vessel *Mystic Clipper*.
- Acquired Connecticut Development Authority financing for the construction of the *Mystic Clipper*.
- Responsibilities included the hiring and supervising of the work force (20 employees), and the purchasing of all equipment and materials.

1973-1981

Captain, *Mystic Whaler*, Mystic, Connecticut.

- Responsible for daily operation, passenger safety and schedule compliance of 100 ton sailing passenger schooner with a certified passenger capacity of 180.
- Administrative duties included planning of schedule, purchasing of equipment and hiring of personnel.
- Trained and managed 5 crew members each season.

PROFESSIONAL AFFILIATIONS

National Marine Historical Society
 Maryland Historical Society
 Delaware Bay Schooner Project

PUBLICATIONS

Chesapeake Bay Schooners, (with Ann Jensen), Tidewater Publishing, Centreville, Maryland, December, 1992.

Resume

SIGRID TRUMPY

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Professional Expertise

Curatorial and organizational skills in collections management. Familiarity with all phases of exhibitions including development of the initial theme, choice of items to be exhibited, proper matting and framing, labels, installation, lighting, invitations, posters and promotion of the exhibit with the press. Experience with the organization of traveling exhibitions including insurance, transportation, installation, publications and promotion. Ability to carry projects from research through publication of printed material. Familiarity with Macintosh computers and preparation of publications using Pagemaker. Knowledge of all printmaking techniques with specialty in etching.

Experience Summary

The Beverley R. Robinson Collection, U. S. Naval Academy Museum, 1982 - present,
Curator of Prints.

As Curator, responsible for active acquisitions program in addition to security, loans to and from the collection, preservation and conservation of the collection. Organized and executed exhibitions and publications programs for a comprehensive collection of 5000+ historic naval prints. Developed research library for print study. Prepared and published a fully illustrated catalogue from the collection (*Naval Prints from the Beverley R. Robinson Collection, Volume 1: 1514 - 1791*). Used computer coded typesetting methods and desktop publishing programs, designed visual character of printed catalogues and posters. Worked closely with exhibiting artists and/or museums. Curated a yearly exhibition program; edited and designed exhibition brochures, posters and invitation; maintained computer mailing list; planned openings. Assisted in development of database management of collection. Supervised the work of two employees. Attended Fine Print Fairs on an annual basis. Oversaw and planned the use of an annual budget of \$185,000. Monitored monthly and yearly expenses. Responded to inquiries and visiting researchers concerning the collection. Set up internship program with local college.

Mitchell Gallery, St. John's College, Annapolis, Maryland, June 1992 - present,
Exhibits Preparator.

Responsible for the installation of 5-7 exhibits per year. Design, construction, lighting and installation. Complete all condition reports; incoming and outgoing. Work with 4-5 student assistants. Construct or oversee the construction of necessary bases and carpentry projects.

Experience Summary, cont'd.

Maryland Hall for the Creative Arts, Annapolis, MD, 1978 - 1990.

Instructor for course in etching which covers the following techniques: line etching, drypoint, aquatint, mezzotint, engraving, multiplate color and viscosity printing.

Verso Etching Workshop, Annapolis, MD, 1978 - present.

Director of open workshop for experienced etchers.

Free State Press, Annapolis, MD, 1980-81.

Design and production artist.

Crawford Gallery, Annapolis, MD, 1977-79.

Carried out all phases of matting and picture framing.

Practicing Painter, 1969 - present.

Exhibition and awards history upon request.

Additional Experience

Juror for Emerging Artists Exhibition, July 1991, Maryland Federation of Art, Annapolis, Maryland

Juror for Scholarships for Scholars, Inc., Anne Arundel County Public Schools, 1985-90. Judge for fine arts scholarships given to high school seniors with high academic standing and fine arts abilities.

Education

Maryland Institute College of Art, B.F.A., 1969

Pratt Institute, M.F.A., 1975

Classes and Workshops

Smithsonian Institution Museum Programs: "Developing, Managing and Maintaining Collections", "Traveling Exhibitions" "Museum Graphics: Exhibitions and Publications". Metropolitan Museum of Art, "Museum Publications". Various classes in computer operation.

References

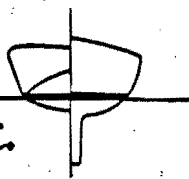
Kenneth Hagan, Director
U.S. Naval Academy Museum
Preble Hall, USNA
Annapolis, Maryland 21402
(410) 267-2178 / (410) 267-2108

James Cheevers, Senior Curator & Associate Director
U.S. Naval Academy Museum
Annapolis, Maryland 21401
(410)-267-2108

Hydee Schaller, Director
The Mitchell Gallery
St. John's College
P.O. Box 2800
Annapolis, Maryland 21404-2800
(410) 626-2556

Tom May, Tutor
112 Mellon Hall
St. John's College
P.O. Box 2800
Annapolis, Maryland 21404-2800
(410) 263-2371 ext. 421

Kaufman Design inc.



Naval Architects and Marine Engineers

F. Michael Kaufman III
Naval Architect and Marine Surveyor

Kenneth E. Court, P.E.
Naval Architect and Marine Engineer

Harold M. Whitacre III
Naval Architect and Marine Engineer

SNAME, NAMS, ASNE, SBYD, ABYC

MD #13447 (Mechanical)
SNAME, SBYD

SNAME, SBYD

KENNETH E. COURT, P.E.

NAVAL ARCHITECT AND MARINE ENGINEER

EDUCATION

B.S. Naval Architecture and Marine Engineering, Webb Institute of Naval Architecture, 1960

Westinghouse Management Career Development courses, 1969-1980

EXPERIENCE SUMMARY

Kaufman Design, inc. - Naval Architect/Partner	1986-Present
Consulting Naval Architect	1981-1986
Sabbatical (Cruise from Turkey, 37' Yawl)	1980-1981
Westinghouse Electric Co. - Naval Architect	1968-1980
World Cruise (Hawaii, Red Sea, Chesapeake, 28' Ketch)	1965-1968
Pearl Harbor Naval Shipyard - Naval Architect	1960-1965
Related Experience - Naval Architecture/boat building	1953-1960

DETAILED WORK HISTORY

Present - Partner, Kaufman Design, Inc., Annapolis, Maryland.

1986 Partner. Yacht design, power and sail, and commercial projects. Designs include fiberglass, aluminum, wood and steel. Naval architectural and powering design, test, project management and control. Naval architectural, hydrodynamic and marine engineering analysis and evaluation of vessel design, performance and equipment, including inclining experiments and analysis of collisions, failures, capsizes and sinkings & cost and contract analysis.

1986-1981 Consulting Naval Architect

Kaufman & Associates, Annapolis, Maryland. Naval Architect Associate, and Project Manager for proposals and concept design of yachts and commercial projects. Concept design of ferry boat for Wicomico River. Proposed analysis of Small Passenger Vessel Stability Test procedure to USCG, participated in proposals and analysis of light weight hovercraft, GRP mine sweepers, and various yacht designs. Proposed design of replacement Naval Academy 44' LOA Sail Training Yachts, coming in second in final competition.

Westinghouse D and ESC. Participated in the naval architectural review of the International Frigate ship design.

. The American Original Corporation, Seaford, Delaware. Evaluated and recommended modifications to an 83' clam dredge to improve stability and seaworthiness to meet IMCO regulations. Prepared detailed design, and performed T&E of as-built hardware, including the inclining experiment.

. Forensic Technologies International, Annapolis, Maryland. Investigator and expert witness in marine insurance cases. Project engineer with technical and financial responsibility for large projects (billings in excess of \$100,000). Structural analysis of barge and yacht hull failures. Dynamic analysis of collisions.

. Arctic Enterprises, Inc., Annapolis, Maryland and the U.S. Department of Energy. Program manager and principal author of the Fuel Cell Propelled Submarine Tanker System Study (a \$95,000 conceptual design study).

. Other Contracts. Evaluate structural design failures of small craft. Compute capacity tables and loading recommendation for barges. Dynamic analysis of collisions and vessel sinkings. Design and manufacture of a modified rudder form and keel "fix" for a 37' racing sailboat for a private customer. Design and manufacture of chain plates and step for bendy mast modification. Redesign and replace rudder bearing.

1981-
1980 Sabbatical - Offshore cruising for one year from Turkey to Annapolis in command of a 37' yawl. Subject of 1985 SNAME paper (see publications).

1980-
1968 Westinghouse Electric Co. - Oceanic Division, Annapolis, Maryland. Supervisor of Fluid Dynamics and Naval Architecture. Responsible for technical, cost and schedule control, personnel development and utilization on all naval architectural and hydrodynamic projects within the Division. Work included low-drag technology, cable towed systems, submarine and surface ship design, weight control and hydrodynamic model testing.

Project responsibilities included - Advanced Light Weight Torpedo (ALWT) proposal: manager and lead mechanical engineer on torpedo systems, the conceptual design of the shaped charge warhead and optimization trade-offs of the total torpedo system. Conceptual and detailed design and regulatory board review of a major ship modification. Consultant to Mare Island for conversion of Turtle (DSV3) to 10,000 ft. depth capability, and design and test analysis of special purpose naval submarines.

Project Engineer responsible for the Multibody Test Program, a 6-month, \$1 million program in which WEC designed, built and tested three different advanced heated laminar flow hull forms, developing heat exchanger designs and manufacturing processes concurrently. Lead naval architect for design of Deepstar 20,000 (a deep diving 3-man submersible). Various ship and submarine modifications and conceptual design studies.

1968-
1965 World Cruise - Voluntary yacht crew on Pacific cruise, first mate/navigator on 100' schooner in Tahiti, deck hand on New Zealand trawler, and owner, skipper and navigator aboard own boat. Subject of 1975 SNAME paper (see publications).

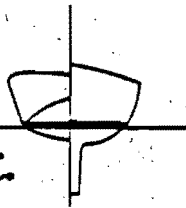
1965-
1960 Pearl Harbor Naval Shipyard - Hawaii. Served as naval architect with responsibilities including submarine test trim dives, inclining experiments, sea trials, studies of stability, loading and ballasting; experiments on seakeeping abilities and consulting work on small vessels; test engineering in the field, line drawings, structural design in GRP and steel, and curves of form and capacity of naval combatant and auxiliary vessels.

1960- Related Experience - Includes steel barge design for Higgins, New Orleans, small
1953 wooden boat design for 24' motor boats, ship model testing at Newport News
Shipbuilding Hydraulics Laboratory, engine cadet aboard SS Exlona, sea trials
of USS Ranger, student trainee, machinist and welder at New York Naval
Shipyard, apprentice boat builder, Hartge's Yacht Yard, Galesville, Maryland.

SOCIETIES, HONORS AND PUBLICATIONS

- . Registered P.E., Mechanical #13447, Maryland.
- . Society of Naval Architects and Marine Engineers - Life Member
- . "Extended Cruising - The Second Time Around," 1985, Seventh Chesapeake Sailing Yacht Symposium, SNAME - CBYRA & USNAYS.
- . "Extended Cruising - An Overview," 1975, Second Chesapeake Sailing Yacht Symposium, SNAME - CYBRA.
- . Fuel Cell Propelled Submarine Tanker System Study, U.S.D.O.E., 1982.
- . Numerous articles, reports, designs and proposals for Westinghouse and others, 1960 - present.
- . Valedictorian, Class of 1956, St. Andrew's School, Middletown, Delaware.

Kaufman Design inc.



Naval Architects and Marine Engineers

F. Michael Kaufman III
Naval Architect and Marine Surveyor

Kenneth E. Court, P.E.
Naval Architect and Marine Engineer

Harold M. Whitacre III
Naval Architect and Marine Engineer

SNAME, NAMS, ABME, SBYD, ASYC

MD #13447 (Mechanical)
SNAME: SBYD

SNAME, SBYD

F. MICHAEL KAUFMAN, CMS

NAVAL ARCHITECT AND MARINE SURVEYOR

EDUCATION

University of Michigan, 2 years Naval Architecture towards B. S. Degree, 1962 - 1965

Understudy to Yinkel Mok at American Marine, Naval Architecture Design, 1966 - 1968

IBM school for Fortran IV, 1967

U. S. Army Officers Candidate School and other Staff Schools, 1968 - 1970

Understudy/Apprentice to William Thomte, Atlantic Marine Surveyors, 1973 - 1974

Related Naval Architecture & Marine Survey seminars, 1972 - Present

EXPERIENCE SUMMARY

Kaufman Design Inc. - Naval Architect/Partner 1971 - Present

Atlantic Marine Surveyors - Surveyor/Partner 1973 - 1978

U.S. Army - 1st Lieutenant 1968 - 1971

American Marine Corporation - Naval Architect 1966 - 1968

SURVEY EXPERIENCE

Power & Sail, 50% each

Steel
Aluminum
Conventional wood
Cold molded wood

Fiberglass
Cored fiberglass
C-Flex fiberglass
Ferro cement

Fiberglass of all types comprises 90% of survey experience.

From 1975 to 1985, surveys of approximately 120 - 130 boats per year. Survey work continues at a lesser rate due to design work load.

DETAILED WORK HISTORY

Present - Partner, Kaufman Design Inc., Annapolis, Maryland; Naval Architects and Marine Engineers of Annapolis, incorporated 1975 (called Kaufman & Ladd until 1981). Design of yachts, both power and sail, and small commercial vessels.

Personal capabilities include extensive design and engineering analysis, construction supervision, and survey experience in:

- Ocean cruising sail, ocean racing sail and smaller sailing vessels.
- Large power yachts - ocean/inland.
- Commercial tugs, towboats, offshore supply, barges, ferry boats, fishing vessels, ships, and special purpose vehicles.
- Charter craft - sail and power.

Design and survey experience in all materials, including:

Steel	Fiberglass single-skin
Aluminum	Cored fiberglass
Conventional wood	C-Flex fiberglass
Cold molded wood	Ferro-cement

Structural designs are performed to ABS Rules, Lloyds, or as applicable.

Tank testing, inclining experiments, propulsion and fluid dynamics conceptual design of vessels and ocean systems.

Litigation Support/Expert Witness:

- Sailboat Structure & Rigging
- Planing Power Boat Structure
- Power Boat Speed

For a detailed listing of designs, see the summary on page 3.

1981 - Kaufman & Ladd, Inc., Naval Architects and Kaufman & Ladd, Marine Surveyors, Inc., Annapolis, Partnership with R. A. Ladd.

1975- F. M. Kaufman Yacht Design in Annapolis. Design of yachts, both power and sail, and small commercial vessels. Concurrently worked with William Thomte as marine surveyor (1972 - 1978).

1978 - Atlantic Marine Surveyors with William Thomte, Cambridge, Maryland. Partner
1973. 1975; understudy apprentice 1973 - 1974.

1971- U.S. Army. 1st Lieutenant, Military Intelligence, District Intelligence
1968 Advisor, Son Hoa, Viet Nam, Bronze Star.

Schools:

- Engineering Officers Candidate School
- Vietnamese Language
- Staff Officers Military Intelligence
- Phung Hoang - student & instructor

1968- American Marine Corporation, Naval Architect. Shipyard for smaller
1966 commercial steel and aluminum vessels.

- Detailed naval architecture, hull and structural design
- Understudy to Yinkel Mok, Design Chief

1965 - 2 years naval architecture at University of Michigan School of Naval
1962 Architecture prior to employment as naval architect at American Marine.

DESIGNS

Designs in production include:

- 51' Sail, cutter/ketch, Skye/Sea 51/Mao Ta 51 - 40 built
- 50' Sail, cutter/ketch, Dickerson 50 - 2 built
- 47' Sail, cutter/ketch, CT 47 - over 70 built
- 47' /49' Sail, cutter, Kaufman 47/49 - 15 built
- 43' Sail, cutter, Kaufman 43 - 5 built
- 42' Sail, cutter, Albin Nimbus 42 - 20 built
- 37'/40' Power, Young Sun power cruiser & sport fisherman - 3 built
- 24' Power, Topaz 24/Bimini 24 - over 400 built
- 40' Sail, XLDB (extra light displacement), Screamer 12M - 12 built

Other designs include:

- 130' Motor yacht, preliminary design
- 70' Planing motor yacht, detailed design - 1986/87
- 50' Custom ketch "Karina", built in 1984
- 65' Production ketch/cutter, preliminary design
- 50' Production motorsailer, preliminary design
- 60' Oyster shell carrier
- 30' Hooper Island Launch, built in 1983
- Asphalt barge, dumb barges, offshore supply boat, 60' diving boat, tug

MEMBERSHIPS, HONORS, PUBLICATIONS

Society of Naval Architects and Marine Engineers (SNAME) - Life Member

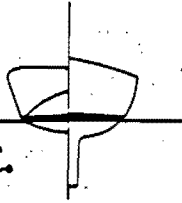
National Association of Marine Surveyors (NAMS) - Member #120-36

~~American Society of Naval Engineers~~

American Boat and Yacht Council

Chairman: Membership Screening Committee NAMS MidAtlantic

Kaufman Design inc.



Naval Architects and Marine Engineers

F. Michael Kaufman III
Naval Architect and Marine Surveyor

SNAME, NAMS, ASNE, SBYD, ABYC

Kenneth E. Court, P.E.
Naval Architect and Marine Engineer

MD #13447 (Mechanical)
SNAME, SBYD

Harold M. Whitacre III
Naval Architect and Marine Engineer

SNAME, SBYD

HAROLD M. WHITACRE, III

NAVAL ARCHITECT AND MARINE ENGINEER

EDUCATION

BSE, Naval Architecture and Marine Engineering, University of Michigan, 1983

EXPERIENCE SUMMARY

Kaufman Design inc. - Naval Architect	1988 - Present
Whitacre Yacht Design - Naval Architect/Yacht Designer	1983 - 1988
Gibbs and Cox, Inc. - Naval Architect/Project Manager	1983 - 1988
Bath Iron Works - summer intern naval architect - FFG 7 class	1982

DETAILED WORK HISTORY

Present - Kaufman Design, Inc., Annapolis, Maryland; Naval Architect and Marine Engineer. Responsibilities include feasibility studies, conceptual and detail design for yachts and other small craft. Recent work includes re-powering of R/V Ridgely Warfield, computer-aided design, program software development, performance analysis of yachts and small craft, IMS rating rule analysis and optimization for racing boats.

1983 - Whitacre Yacht Design. Self-owned yacht design and consulting company.
1988 Emphasis placed on racing yacht design and analysis. Consulted for J. Hamilton Yacht Company, Annapolis, MD. Notable designs include the Delta-one-design, a collegiate and one-design racing dinghy, and the Whitacre 30, an ultralight MORC design. IMS rating rule analysis and optimization has been used to improve several local racing boats.

1983 - Gibbs and Cox Inc., Arlington, VA. Naval architects and marine engineers.
1988 Involved exclusively with U.S. Navy surface combatant design.

Project Manager and Naval Architect. Responsible for whole-ship feasibility level designs. Primary emphasis has been in advanced marine vehicles such as SWATH (Small Water Plane Area Twin Hull), Hydrofoil, and surface effect ships. Responsibilities included ship configuration, arrangement, resistance and stability calculations. Designs included surface combatants, oceanographic research ships and aircraft carriers. Notable conceptual designs included the SWATH T-AGOS-19, CGBL, and the reduced radar cross section guided missile cruiser.

Wrote and developed computer software for ship design and analysis. Most programs have been written on Digital Equipment Company VAX mini-computers and IBM personal computers. Experienced in several computer languages including FORTRAN and BASIC. Additional experience includes computer aided drafting on Auto-CAD drafting systems.

SOCIETIES

Society of Naval Architects and Marine Engineers - Associate Member

Mac: HMW Resume 4/88-1

Schwarz Purcell Architects, P.A.

One State Circle Annapolis, Maryland

Schwarz Purcell Architects, P.A. is located at One State Circle in the Historic District of Annapolis. The principals formed the firm in 1986 to provide comprehensive architectural services for a diversified clientele. Both principals, natives of Annapolis, are well versed in the complexities of renovation and rehabilitation work as well as those of new design.

Schwarz Purcell recognizes that the business of architecture is a service profession and in this regard considers partner attention, excellence in design and respect for budgets a foundation of the firm's philosophy. The principals believe that each commission has to be designed in response to the specific character and features of the site in conjunction with the client's requirements. They have no specific bias about styles or forms but make it a practice to research each project's architectural context and study the site in which the project will be built. Whether the project warrants a solution with elegant simplicity or sophisticated complexity, they are committed to achieving technical excellence in design and function.

The work which spans the partners' involvement in the profession has been varied, both in its scale and building type. Currently, they are involved with the adaptive reuse of Circle Theater in Historic Annapolis, the renovation and design of two pool, track and locker room facilities for the Merritt Organization, a 1000 seat sanctuary, classroom building and facilities master plan for Mountain Christian Church in Harford County, Maryland and a 120 unit marina and waterfront condominium project in Cecil County, Maryland. Schwarz Purcell is also providing construction administration services for the new \$16m science classroom complex at St. Mary's College of Maryland, St. Mary's County and have completed a Town Plan Design for Huntingtown in Calvert County, Maryland.

The offices of Schwarz Purcell Architects, P.A. are interconnected by a Macintosh Local Area Network computer system. The firm has computer assisted design capabilities, using VersaCad software, and uses the industry standard MasterSpec for specifications. The firm carries insurances through DPIC/Orion, the Ebersberger Company in Severna Park, Maryland. Schwarz Purcell Architects, P.A. operates as a corporation under the laws of the State of Maryland. Craig Purcell, AIA is President; John J. Schwarz, RA is Vice-President.

The firm and its principals have won a number of design awards including a 1991 American Planning Association Award for Outstanding Design Process Innovation, a 1990 Anne Arundel County Executive Excellence in Design Award and a Baltimore AIA/Baltimore Magazine Housing Design Award.

Schwarz Purcell Architects, P.A.

JOHN J. SCHWARZ, R.A.
PRINCIPAL

Education: Bachelor of Architecture
1977, Virginia Polytechnic Institute and State University

Licenses: 1984, Registered Architect, Maryland
Pending, District of Columbia, Delaware, Pennsylvania, NCARB Certificate

Experience: A practitioner in the field of architecture for fifteen years, Mr. John J. Schwarz has earned a reputation among his clients for the sensitive integration of new buildings within existing environments. Mr. Schwarz has served as Partner-in-Charge/Design Principal for some of Schwarz Purcell's most significant projects to date. Examples of his work include: renovation and rehabilitation of Pinkney Hall, ca. 1850 at St. John's College; additions and renovations to the Merritt Athletic Clubs in Annapolis and Towson; the renovation and rehabilitation of the old Circle Theater Building, a mixed-use project in the Historic District of Annapolis. Mr. Schwarz recently completed an assignment as Construction Administrator for the new sixteen million dollar Science Center at St. Mary's College of Maryland. He is committed to contextual architectural design and technical excellence.

As an Associate/Project Manager for Ayers Saint Gross Associates, Inc., Mr. Schwarz designed the addition to the Downtown Athletic Club in Baltimore, Maryland; his work on Tremont Plaza Hotel in Baltimore was awarded a citation by the Baltimore Chapter of the AIA. Serving as Project Architect for RTKL Associates, Inc., two of Mr. Schwarz' projects received design awards. The Savings Bank of Baltimore received the Award of Merit from the Baltimore Chapter of the AIA and the design for the complete rehabilitation of Mazza Gallerie in Chevy Chase, Maryland earned a Citation of Design, Environmental Graphics, from PRINT Casebooks.

John J. Schwarz, RA, is a member of the National Trust for Historic Preservation. He has lectured on Design at a number of Schools of Architecture. Mr. Schwarz serves as the City of Annapolis representative to the Severn River Commission for Anne Arundel County.

JOHN P. GUTTING

The office of John P. Gutting, Landscape Architect, was established in Annapolis in 1970. From its beginning this practice has received and completed a variety of private and public commissions. A common denominator of each has been the attempt to carefully combine the proposed design elements with the existing natural conditions. In order to create and communicate any solution, the work procedures routinely incorporate a site and user analysis, conceptual studies and models, design refinements, detailed construction drawings, and supervised implementation. Each of these phases incorporate Mr. Gutting's complete and individual attention. This process results in direct accountability for all work and a singular interest and understanding of each project.

Professional History

University of Illinois, Bachelor of Landscape Architecture/Honors, 1969

State of Maryland Registration, 1974

Landscape Architectural Practice, Annapolis, Maryland/1970 - 1986 and Church Hill, Maryland/1984 to present

Honors & Publications

Progressive Architecture - Honor Award for Urban Design/"Scott's Point: Guidelines for Change", Chestertown, MD, 1982

Mid-Atlantic Country Magazine - Heritage Award for Architecture and Design, 1987

Baltimore Magazine - May 1987

Annapolitan - May 1991

The Baltimore Sun Magazine - March 1992

Public Service

Master Plan Design, Annapolis Fine Arts Festival, Annapolis, MD

Planning Committee Member, Wildfowl Trust of North America Horsehead Sanctuary, Grasonville, MD

Co-Founder & Board Member, Friends for the Preservation of Church Hill, Church Hill, MD

Board Member, Church Hill Theater, Inc., Church Hill, MD

Board Member, Queen Anne's Conservation Association, Queen Anne's County, MD

Range of Experience

Over three hundred commissions encompassing historic preservation; urban design; parks and recreation; nature preserves; education, commercial and religious facilities; community housing; and private residential.

Project responsibilities include site and regional analysis; urban and rural master planning; design details for all aspects of project construction; ecological planning for plant and wildlife conservation; and regional and site design.

Lecturer and critic for the Conway School of Landscape Design/Masters of Landscape Architecture program, Conway, Massachusetts, 1987 to present.

Site Design/Master Planning

P.O. Box 205
Robert's Station Road
Church Hill, Maryland 21623
410-556-6716

SITE DESIGN: TYPICAL PHASES

Landscape design is a sculptural process. This process begins with a detailed study of the entire site. Within each property there exists a number of obvious and subtle conditions which will become the design dictates for guiding the new work. The essential task is to thoroughly understand these conditions, and then to functionally and aesthetically combine the proposed uses with the existing site in ways which create an ecologically integrated whole. The results become a composition of many different materials and objects; of buildings, roads, walks, landforms, walls, water features and plant species, which together form a distinct place. It should be a place which is both in harmony within itself, and with the character of its regional environment.

In order to produce such a result several work phases are required.

DESIGN

- I Owner - Landscape Architect Interview
Establish a program of the desired and required elements which should be incorporated into the site design. This process should include an analysis of present and future requirements.
- II Site Examination & Analysis
A detailed study of all natural, cultural and perceptual forces affecting the site.
- III Preliminary Design
A generalized plan which includes the basic design concepts and approximate sizes, shapes, locations and interrelationships of the program elements.
- IV Design Refinement and Development of Working Drawings & Construction Specifications
Following the Owner's approval of the Preliminary Design, this generalized plan will be developed into a detailed final design. This includes the production of all drawings which will be required for the accurate and complete construction of the design. The usual drawings required for this work provide specific instructions for all grading and sediment control, site design layout, lighting design, construction details and site planting.

INSTALLATION

- V Recommendations and Assistance with Selection of Contractor
- VI Overseeing Construction
In order create a constructed result which accurately reflects the design's intent, all phases of construction will be supervised in the field.

FUTURE VISITS

- VII Because of the complexity and continuous natural changes which occur in all site design projects, periodic inspections should occur regularly following the completion of the initial construction. The observations resulting from these visits will provide important design refinements.

RESUME

ANNE BRAY
SEPT, 1993

PERSONAL:

Born [redacted] P6/b(6)
Married with three children
Current residence: [redacted] P6/b(6)
Phone: [redacted] P6/b(6) home) or 4651 (work)

EDUCATION:

Graduated from Rockland (Maine) High School, June 1955
Attended University of Maine at Orono, Maine

EMPLOYMENT:

1956-58 Electric Boat Division of General Dynamics Corp, Groton,
CT, as a research assistant
1971-75 Mystic Seaport Museum, Mystic, CT, as shipyard painter
1979-81 Brooklin Boatyard, Brooklin, ME, as yacht painter
1981-83 Owned and operated Naskeag Canvas, making small sails
seabags, etc.
1984-93 WoodenBoat Magazine, Brooklin, ME, as Research Director

PUBLICATIONS:

Compiled The WoodenBoat Index for issues 1-60
Compiled The Supplement to The WoodenBoat Index for issues 61-78
Compiled The WoodenBoat Index for issues 1-100
Compiled The Directory of Wooden Boatbuilders
Compiled Boatbuilding Woods, A Directory of Suppliers
Compiled The Designs of William H. Hand, Jr.
Compiled The 1993-94 Register of Wooden Yachts
Photographer for How to Build the Haven 12-1/2 Footer
Photographer for Building the Nutshell Pram
Photographer for several WoodenBoat Magazine articles

OTHER:

Consultant to Mystic Seaport Museum for computerization of its
watercraft-oriented collections

Consultant to Mystic Seaport Museum for computerization of its
Ships Plans Collections (under contract with WoodenBoat)

Compiler of Union List of Small Craft for Mystic Seaport Museum
and Small Craft Curators Organization (under contract with
WoodenBoat Publications)

Compiling computerized bibliography of books and articles
relating to wooden boats

TOM CUNLIFFE

At 46 years of age, TOM CUNLIFFE is one of the UK's foremost authorities on seamanship and navigation. As well as being a sought-after lecturer, he is a regular contributor to *Yachting Monthly* and has written technical articles for sailing magazines in the United States, France, and Holland.

He has produced a complete series of navigation manuals in addition to books on seamanship and boathandling, many of which have been translated into other languages. He has twice won the coveted 'Best Book of the Sea' award, most recently for *Head, Reef and Steer*, a work on traditional seamanship.

He has sailed professionally since 1969, working with diverse types of vessel in numerous countries. For five years he was an Offshore Sailing Instructor and Examiner with the National Sailing Centre at Cowes, and his video of an RYA practical course is a best seller. He has also made several extended cruises with his family in his own yachts, taking him from Greenland to Brazil and from Russia to the Caribbean. He has spent two years sailing in the USA.

Since 1985 he has been a member of the small panel of RYA Examiners who train and assess offshore instructors for the national scheme. He owns a classic 50ft cutter.



Marine Trades Association of Maryland, Inc.

"Working Together For The Marine Industry"

Post Office Box 3148 • Annapolis, Maryland 21403
410-267-7469 • BALT. 410-269-0741 • FAX 410-626-1940

OFFICERS

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David A. Morrow
Henry Murray Agency

Vice President

John Burgreen
Annapolis Yacht Sales

Secretary/Treasurer

Sandy Zimmerman
Turkey Point Marina

Executive Assistant

Barbara B. Vosbury

September 9, 1993

Mr. Clark Poston
Draketail Maritime Lyceum
1139 Cumberstone Road
Harwood, MD 20776

Dear Clark:

The Marine Trades Association of Maryland is very excited about the new program you have developed.

There is a great need for skilled workers in our industry. We have a high demand for everyone from the apprentice to the highly skilled wood worker and refinisher. This program will certainly help fill a large void that exists in the available labor pool.

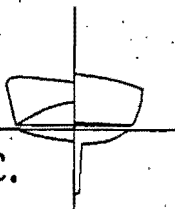
Please do not hesitate to call on our office if we can be of any assistance as your project progresses. Best of luck!

Sincerely,

David Morrow
President, MTAM

DM/bk

Kaufman Design inc.



Naval Architects and Marine Engineers

F. Michael Kaufman III
Naval Architect and Marine Surveyor

SNAME, NAMS, SBYD, ABYC

Kenneth E. Court, P.E.
Naval Architect and Marine Engineer

MD #13447 (Mechanical)
SNAME, SBYD

Harold M. Whitacre III
Naval Architect and Marine Engineer

SNAME, SBYD

Terence Fitzsimmons
Marine Surveyor

NAMS, ABYC, SNAME

Teaching Support c93w22cv.993

Mr. Clark O. Poston, Director
The John Gardner Boatwright School
Draketail Maritime Lyceum
Box 895
Shady Side, MD 20764

9 September 1993

Re: KD 93w22 Yacht Design for Boatwrights - a Course in Practical
Engineering & Design

Dear Mr. Poston,

We have followed the Draketail Project with interest, and have been excited by the local revival of boat building skills. Bob Besse's idea of revitalizing the approach to learning by reorganizing it to a process of being led, not taught, is an encouraging step. I grew up in the West River region in an environment similar to your Lyceum and in the early 1950's spent 3 summers apprenticed to "Capt. Dick" Hartge building wooden boats in Galesville, Maryland across the river from Shady Side. This was supplemented by four years of college studying Naval Architecture & Marine Engineering at Webb Institute. My two partners have had parallel experiences with hands on and college training.

For your teaching program we offer the services of the three partners at Kaufman Design, inc.. We are products of two of the primary colleges of naval architecture in this country, Webb Institute and the University of Michigan. We are active designers, and are the design team for Michael Carr's 60' BOC, "Imagine" a state of the art aluminum racing yacht to be christened the 18th of September. We are familiar with all major boat building materials: wood, fiberglass, composites, steel and aluminum. These qualifications should be useful in training your students by using working examples from our extensive background and hands on design experience. Each of us has worked in construction of boats and ships. Ken Court is a registered Profesional Engineer(Mechanical).

Our plan is to teach basic engineering skills to boatwrights. These skills will permit the trainees to understand engineering design requirements and practices as they apply to boat building details. These skills will permit the boatwright to correctly evaluate and initiate changes which must be made in the course of construction without weakening or compromising the integrity of the vessel.

Armed with these skills the boatwright will be able to make the right choices, will have the ability to communicate with the designer for approval of these changes, and will develop a better respect for the relationship of the design and the designer to the hardware.

Our capabilities include the ability to teach the following elements of the curriculum: mechanics - practical, theoretical & applied; drafting and lofting; lines plans; arrangements - form & function; marine surveying; structural design; equipment & systems selection & design, and computer applications to design.

This letter is to provide our CV's and related experience. We are designers and problem solvers first and foremost, and have extensive experience with detail design. We have developed the ability to exposit ideas in various symposia and lectures and in courtroom testimony as experts.

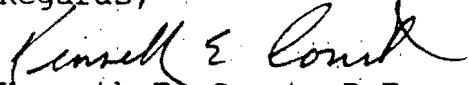
Our CV's are attached. A thumbnail sketch of the three of us is listed below indicating experience in various symposia and lectures where teaching has been the goal:

Partners: Mike Kaufman, Ken Court, Hal Whitacre

Mike	Community college course 1991 - overview of yacht design for people in the marine business
Mike, Ken, Hal	Safety at Sea Seminar 1991, 1992, 1993 (planned)
Mike, Ken	Marine Surveyors symposium 1991 - new trends in materials and design
Ken	SNAME Annual Meeting 1991 - experience in weight control and other design observations
Hal	SNAME Sailing Yacht Symposium 1992 - "Magic" - a revamped Star boat design
Ken	SNAME Power Boat symposium 1992
Hal	SNAME Small craft panel 1992 - "k" value method of evaluating hull efficiency
Ken	SNAME Sailing yacht Symposium 1975 and 1985 - Extended Cruising an Overview from a naval architect's point of view. 1975-92 - Various slide shows & lectures regarding extended cruising.

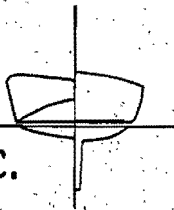
We look forward to working with you on this project.

Regards,


Kenneth E. Court, P.E.
Naval Architect, Vice President

encl: CV's - Ken, Mike, Hal & KD flyer

Kaufman Design inc.



Naval Architects and Marine Engineers

F. Michael Kaufman III
Naval Architect and Marine Surveyor

SNAME, NAMS, SBYD, ABYC

Kenneth E. Court, P.E.
Naval Architect and Marine Engineer

MD #13447 (Mechanical)
SNAME, SBYD

Harold M. Whitacre III
Naval Architect and Marine Engineer

SNAME, SBYD

Terence Fitzsimmons
Marine Surveyor

NAMS, ABYC, SNAME

Teaching Support
c93w22!1.993

Mr. Clark O. Poston, Director
The John Gardner Boatwright School
Draketail Maritime Lyceum
Box 895
Shady Side, MD 20764

9 September 1993

Re: KD 93w22 Yacht Design for Boatwrights - a Course in
Practical Engineering & Design

Dear Mr. Poston,

A few comments regarding your proposal:

Our letter of intent is attached, we can revise within reason as
need requires.

For estimating use:

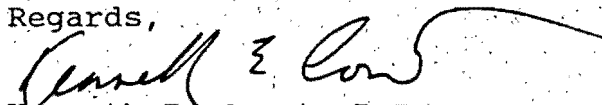
teaching	\$ 30,000	for the first year paid as a retainer at a rate of \$ 2,500 per month. This would be to interact with the lyceum & develop the curriculum/ course plan.
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teaching	\$ 40,000	for the 2nd & 3rd years
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We would urge that some engineering be taught in the first year and
every year. We have assumed 9 months per year course work and a 2
week internship in the industry for each student.

The back to back course work in the 2nd year - 2nd semester and 3rd
year - 1st semester would in our opinion be better interspersed
over the 1st - 3rd years. Check with Bath, Iron Works & Newport
News Apprentice programs.

Regards,


Kenneth E. Court, P.E.
Naval Architect, Vice President



Box 1095

508-693-4658

7 March, 1993

Clark O. Poston
15 Munroe Court
Annapolis, Maryland
21401

Dear Clark:

It was great to talk with you last week and to hear of your prospective apprenticeship/school program. It sounds like a very worthwhile endeavor.

Our boatbuilding, design and repair business continues to grow at a steady pace. At present we are finishing up several interesting projects which involve all the skills of a master shipwright. These projects include an eleven foot flat bottom sailing skiff, complete restoration of the famous 65' Alden schooner WHEN AND IF built for General Patton, the lines for a 45' schooner of my design, a new keel for a catboat, and the restoration of a classic 26' Burt Bass Boat. All of these projects are in various stages of completion while our main railway continues to haul and launch dozens of fine wooden boats for repair and maintenance.

One of the biggest challenges in our business is finding qualified, competent craftspeople. We spend a great deal of time training people and it does not always work out, nor is it cost effective.

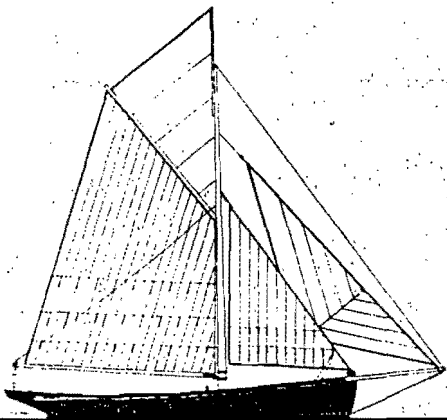
You would be doing us, and dozens of other fine boatyards a great service if you could provide training in boatbuilding skills while instilling and encouraging a sound work ethic in your students -- and I know you will. We certainly will be ready to put your first graduates right to work.

Please let me know if I can assist you in any way.

Best regards

A handwritten signature in black ink, appearing to read "N.P. Benjamin", written over a horizontal line.

Nathaniel P. Benjamin



*Brent Cottage
Lover
Salisbury
Wiltshire SP5 2PW
Tel: (0725) 20710*

6 September 1993

Clark Poston
17 Munroe Court
PO Box 1452
Annapolis
Maryland 21401
USA

Dear Mr Poston

I write in response to your recent enquiry about a system of training and certification for up-grading the general competence of yachtsmen.

As a certificated RYA Yachtmaster yourself, you will be aware of the basic structure of the arrangements in force in the UK, but for the information of other interested parties, I am enclosing a thumbnail sketch of the RYA/DTP (Royal Yachting Association/Department of Transport) scheme, its history and its long-term success.

The Yachtmaster Scheme was, naturally enough, designed and developed for the European sailor, but it has been adopted virtually unchanged by a number of national authorities worldwide, including the Canadian CYA.

Having enjoyed considerable experience of sailing in the eastern US and its adjacent waters, I agree with your conclusion that a new scheme developed along the lines of the RYA system could serve North America well, given the support of the relevant authorities. With that proviso, I would be interested in acting as a consultant in the development of such a programme. On the PR side, we in the UK have learned a good deal about achieving universal acceptance for a system of voluntary qualification. Cynicism and downright resistance are now history for us. It would be a pleasure to make this hard-won experience available in introducing a suitable scheme to American sailors.

Yours sincerely

Tom Cunliffe
RYA/DTP Yachtmaster Examiner

Encl.

THE RYA YACHTMASTER SCHEME

A Brief History and Current Status

The Yachtmaster Training Scheme was instituted more than half a century ago as a high-level voluntary navigation course for yachtsmen, in order to provide a pool of qualified people who might become available to the armed forces in time of hostilities. It continued more or less unchanged in this context into the 1970s.

The courses, which were run in night schools by Merchant Navy instructors, were surprisingly popular. Indeed, they were the only 'start to finish' navigation lessons then available. However, because they contained absolutely no 'hands-on' factor, concern mounted steadily as to their true relevance. As a result, Yachtmaster training was taken over by the Royal Yachting Association (RYA), the national governing body of the sport, who administer the scheme in conjunction with the Department of Transport (DTP).

The scheme has now evolved so that those aspiring to Yachtmaster status must be good seamen as well as able navigators. All examinations take place aboard a yacht at sea, and are carried out by examiners selected under rigorous procedures.

Experience has shown that achievable targets linked ultimately to rigid standards create qualifications worthy of respect. The attainability has been carefully structured so that many sailors and powerboat operators are encouraged to work towards certification 'through the system', while self-taught yachtsmen and women are motivated to present themselves for direct examination.

Within the Yachtmaster scheme, there are grades of competence, each with its own course of instruction and assessment. Entry requirements of seetime and experience have been positively defined so that people can come into the system at a suitable stage and move steadily upwards.

The scheme remains voluntary - no-one is obliged to become a Yachtmaster - but it has now established universal acceptance by virtue of its 'no nonsense' approach to seafaring and the obvious competence of its staff. More than a 100,000 sailors and powerboat owners sign up every year for its courses.

Safety is the scheme's watchword, built on thorough knowledge and experience. There is no doubt that by instilling the essence of true seamanship it makes a major contribution to the lack of incidents around our shores.

THE RYA YACHTMASTER SCHEME

Structure of Qualifications and Course Levels

It will be noticed from the attached documents that skippering qualifications are backed up by a shorebased programme and a course at sea. This has been found to work successfully, as the instructor on the boat does not have to spend valuable time teaching the intricacies of chartwork. His job is to place the student's knowledge of theory into the reality of a yacht working on salt water, possibly at night in a rough sea. The carefully managed combination of the two courses has proved a powerful tool.

Whilst elementary and intermediate programmes carry prestigious 'Course Completion Certificates' for students who reach the required level, only the upper qualifications of the scheme give rise to full Certificates of Competence recognised by the DTP. Details of these are also attached, together with further relevant information.

Additional endorsements are issued to Yachtmaster Instructors and Examiners. These professionals are the lifeblood of the system, with a vital function in maintaining the overall standard. They are assessed to a very high level indeed, with 'course failures' running at around 50%.

