

UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

LAWRENCE HALL OF SCIENCE
A RESEARCH CENTER IN SCIENCE EDUCATION
(415-642-4193)

BERKELEY, CALIFORNIA 94720

April 5, 1983

Myron Thompson
President
Polynesian Voyaging Society
Honolulu, HI

Dear Mr. Thompson,

Enclosed is a proposal to the National Endowment for the Humanities to develop an exhibition and planetarium program to communicate how canoe-building and traditional navigation have influenced the development of Polynesian culture. The planetarium program will feature the voyages of the Hokule'a. The proposal was written by our staff at the Lawrence Hall of Science in collaboration with Will Kyselka of the Bishop Museum Planetarium, and his wife, Lee.

We would be pleased if you and Nainoa Thompson would serve as consultants to help develop the proposed exhibits and planetarium program. The proposal must be submitted before April 25. So, if you and Nainoa are interested in participating, please give the following to Will Kyselka as soon as possible.

1. A letter from each of you stating that you will participate as a consultant to help develop the proposed exhibits, and how many days of consulting time you would like to spend on this project.

2. A resume' from each of you, stating your experiences relevant to this project.

I would also appreciate your comments on the proposal and suggestions for changes or additions. Thank you for your consideration, and I hope that we will meet in the near future. If you have any further questions, please ask Will Kyselka, or call me at [REDACTED].

Sincerely,

Cary Sneider
Associate Director
Astronomy & Physics

UNIVERSITY OF CALIFORNIA, BERKELEY

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LAWRENCE HALL OF SCIENCE
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(415-642-4193)

BERKELEY, CALIFORNIA 94720

April 29, 1983

Mr. Myron Thompson
President
Polynesian Voyaging Society
Honolulu, HI 96821

Dear Mr. Thompson,

Thank you for your informative and enthusiastic letter of support for our joint proposal to create an exhibition and participatory planetarium program on "The Wayfinding Art: Ocean Voyaging In Polynesia." The proposal was approved by the University's Sponsored Projects Office and mailed Federal Express to arrive at NEH on the deadline, April 25th. Your letter was received in time to be included in all 25 review copies that were sent to NEH.

Jenny White, Alan Friedman and I look forward to our initial planning meetings with you and Nai'noa in January, 1984, in the event that NEH decides to fund the project. It is unlikely that we will find out if the project will be funded until December. Nonetheless, I will be in Honolulu on vacation July 25-29, and would like to meet you and Nai'noa informally. That would give me an opportunity to learn something of your work, and perhaps we could discuss some preliminary ideas for the planetarium program and exhibits. I will contact you when I arrive in Hawaii on the 25th to arrange a meeting time at your convenience.

Please share the enclosed copy of the proposal with Nai'noa. I look forward to meeting both of you in July.

Sincerely,

A handwritten signature in cursive script, reading "Cary Snider".

Cary Snider
Associate Director
Astronomy & Physics Education
Lawrence Hall of Science

cc: Dr. Jennifer White, Director of Exhibits, LHS
Dr. Alan Friedman, Director of Astronomy & Physics, LHS



NATIONAL ENDOWMENT FOR THE HUMANITIES

WASHINGTON, D.C. 20506

CODE OF ETHICS

The following is a Code of Ethics to be followed by NEH grantees whose projects relate to American Indian, Aleut, Eskimo or Native Hawaiian peoples. Researchers and scholars should be aware of the following:

- (1) While the body of law and custom on which the Code is based is rooted in relations with the Native peoples of North America, you are urged to follow it whenever living cultures and peoples are involved; and
- (2) The Code is based on the Endowment's adherence to Public Law 95-561, the Indian Religious Freedom Act; Public Law 96-515, the National Historic Preservation Act amendments of 1980; and other relevant public laws governing relations with Native peoples of North America, and is constructed to conform to the principles of these laws.

Researchers should familiarize themselves with these laws so that adherence to Federal statutes will accompany compliance with this Code. Please sign the following statement, thereby assuring the Endowment that work funded by this grant will adhere to the following provisions:

(a) Every effort should be made in advance of project design and execution to engage the agreement, advice and cooperation of members of the Native community in planning and execution of the project and in the disposition of results from the project. This means that the aims of the investigation, exhibition, or project should be communicated to the Native community and the anticipated consequences and results of research or data-gathering should be explained as fully as possible to the individuals and groups likely to be affected.

(b) Where research or exhibition of materials involves the acquisition of material (objects and documents) and transfer of information on the assumption of trust between persons, the rights, expressed interests and sensitivities of those originating the material must be safeguarded.

(c) There is an obligation on the part of the scholar/researcher/principal investigator to reflect on the foreseeable repercussions of research and publication on the participant population and to inform them of probable impact.

Code of Ethics, page two

(d) Native community consultants have the right to remain anonymous or be specifically named and given credit if they so choose. This right should be respected where it has been explicitly promised. Where there is no clear understanding to the contrary, sources should be kept confidential. Because funded proposals, grant reports and other written material in the Endowment's possession are available to the public, no identifications contrary to the wishes of community consultants should appear.

(e) Investigators using recording devices such as cameras or tape recorders or the technique of oral interviewing are also subject to the above criteria. Subjects under study should understand the capacities of such machines and should be free to accept or reject their use.

(f) Individuals or group community consultants should be fairly compensated (through reciprocal exchange or monetary payment) for their services/information and there may be no exploitation of subjects under study. Scholars should make every attempt to guarantee appropriate credit (in the form of co-authorship, co-curatorship or co-investigatorship) and the distribution of financial rewards where appropriate for products resulting from projects.

(g) Any report or work considered for publication (and where applicable and possible, films or exhibitions) should be deposited with the Native representatives of the elders and traditional leaders of the community. Every effort should be made to see that such a representation body has an opportunity to view the films or exhibitions which result from work undertaken in the community.

(h) This Code should not interfere with or preclude any formal agreements made between researchers and Native peoples for the course of research undertaken with Federal funds. Further, the Code does not preclude or supercede ethical codes, subscribed to and endorsed by various professional associations, but rather, intends only to make clear the standards expected of those receiving Endowment funds.

(Name)

Alan J. Friedman, Principal Investigator

(Application number)

"The Wayfinding Art: Ocean Voyaging in
Polynesia"
April 21, 1983

(Date)

FINANCIAL STATEMENT

The Lawrence Hall of Science is part of the University of California and does not receive audited financial statements separate from those of our parent organization. The Lawrence Hall of Science financial statement for fiscal year 1982 which follows this page was drawn from the audited statement of the University of California. The University's auditor, Deloitte, Haskins & Sells provided the accompanying statement regarding the financial position of the University for fiscal years 1981 and 1982.


Barbara E. Baker
Administrative Services Officer

March 14, 1983

Deloitte Haskins+Sells

One Kaiser Plaza
Oakland, California 94612
(415) 452-0250
Cable DEHANDS

October 19, 1982

The Committee on Audit,
The Regents of the University of California

We have examined the balance sheets of the University of California as of June 30, 1982 and 1981 and the related statements of current funds expenditures and resources utilized and of changes in funds balances for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, such financial statements present fairly the financial position of the University at June 30, 1982 and 1981 and the current funds expenditures and resources utilized and changes in funds balances for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Deloitte Haskins + Sells

THE Lawrence Hall of Science MUSEUMBALANCE SHEET
Month June, 1982
(example)

Assets

Cash-Checking Accounts.....	\$ 180,718
Cash-Savings Account.....	N/A
Accounts Receivable.....	N/A
Securities..... Endowments - Book Value	3,107,752
Land, Buildings & Equipment.....	N/A
Total Assets.....	<u>\$ 3,288,470</u>

Liabilities & Fund Balance

Accounts Payable.....	\$ N/A
Notes Payable.....	-0-
Mortgage Payable.....	-0-
Total Liabilities.....	-0-
Fund Balance.....	3,288,470
Total Liabilities & Fund Balance.....	<u>\$ 3,288,470</u>

The Balance Sheet represents the organization's financial picture at one point in time.

FINANCIAL STATEMENT
(example)

STATEMENT OF INCOME, EXPENSES AND CHANGES IN FUND BALANCE
YEAR ENDED June 30 1982
(month) (day)

SUPPORT AND REVENUE

1. Support:		
Contributions.....	\$ 446,348	
Grants (specify) .. Attached.....	609,558	
Other (specify).... University of California.....	385,218	
<u>Total Support</u>	1,441,124	
2. Revenue:		
Admissions.....	160,721	
Membership.....	73,359	
Income from Museum Store..... Food Services.....	452,309	
Income from tuition, fees, performances.....	618,101	
Other (specify)..... Endowment Income.....	240,704	
Benefit Income	64,548	
<u>Total Revenue</u>	1,609,742	
<u>Total Support and Revenue (1 and 2)</u>	3,050,866	

EXPENSES:

Salary and Related Expenses.....	1,880,581	
Museum Store Expenses.....	264,269	
Materials and Supplies.....	568,137	
Printing and Publication.....	--	①
Travel and Lodging.....	8,952	
Rent..... N/A.....	-0-	
Telephone.....	--	①
Utilities.....	--	②
Security System..... N/A.....	-0-	
Other (specify) Equipment.....	57,719	
Teacher Stipends, Scholarships, Consultant Payments	90,490	
<u>Total Expense</u>	2,870,148	
Excess of Support and Revenue over Expenses.....	180,718	
Beginning Fund Balance.....	--	
Ending Fund Balance.....	180,718	

① - Included with Materials & Supplies

② - Utilities, Custodial, Grounds & Building Maintenance are provided by the University of California. Dollar amount not available.

Lawrence Hall of Science

Grants - FY 1981-82

Attachment

		<u>Amount</u>	<u>Total</u>
	<u>Support</u>		
	Grants -		
(13)	National Science Foundation	\$256,158	
(3)	U.S. Department of Education	231,535	
(1)	U.S. Department of Labor	1,716	
(1)	National Endowment Arts	1,078	
(2)	Institute of Museum Services	35,572	
(1)	State of California	83,499	
		<hr/>	
	TOTAL		<u>\$609,558</u>

XI. BUDGET ITEMIZATION for the period from 1 1 84 to 12 31 84
 month day year month day year

Additional Detail Attached

DIRECT COSTS (Please refer to the instructions on Direct Costs before completing this section.)

1. Salaries and Wages (supply names of principal project personnel; for support staff indicate title of position only and number of persons in brackets)

Personnel	Title of Position		full-time equivalent in months spent on project			Amount
			cal	acad	sumr	
Friedman	Principal Investigator	()	1.2			\$ 3,654
Sneider	Co-Director	()	3.6			7,352
White	Exhibits Director	()	3.6			10,269
Fredericks	Exhibits Technician	()	6			14,285
Kiramata	Graphic Artist	()	3.6			7,995
Erickson	Computer Programmer	()	3			3,962
	Librarian	(1)	1.5			2,379
	Secretary	(1)	3			4,325
	Administrative Assistant	(1)	1.2			1,973
	Publicist	(1)	1.2			2,976
	Lecture & Program Coord.	1	1.2			2,161
	Odd Jobber	1	2.87			2,730
	Editor	1	.6			1,302
TOTAL						\$65,363

2. Fringe Benefits (if more than one rate is used, list each rate and salary base)

rate	salary base	Amount
30 % of \$	61,401	\$ 18,421
1.16 % of \$	3,962	46

Total Fringe Benefits \$ 18,467

3. Consultant Fees

name or type of consultant	daily rate of reimbursement	no. of days on project	Amount
Thompson, Myron	200	5	\$ 1,000
Thompson, Nai'noa	200	5	1,000
Dawson, Lawrence	200	5	1,000
Stroup, Dixon	200	5	1,000

Total Consultant Fees \$ 4,000

4. Travel Costs

destination	transportation costs	subsistence costs	days in travel status	Amount (transp. + subsistence)
Honolulu	500 x 3	3 x 62/day	(7)	\$ 2,802
Oakland	500 x 3	3 x 62/day	(7)	2,802
			()	
			()	
			()	

Total Travel Costs \$ 5,604

6/1/79

5. Supplies and Materials (list each major type and indicate the cost computation)			Page 3
type	basis/method of cost computation	Amount	
Slide Duplication	2 sets, 100/set @ 12¢/per slide	\$ 24	
Special Effects Projector	2 @ 400 ea.	800	
Fabric Banners	5 per site @ 100 ea.	1,000	
Office Supplies		1,000	
Miscellaneous Signage	Silkscreen and plexiglass 250/site	500	
Books on exhibition topics		300	
Total Cost of Supplies and Materials		\$3,624	

6. Services (list each major type and cost computation)			
type	basis/method of cost computation	Amount	
Contract w/Bishop Museum	see detail attached	\$35,330	
Draftsman		1,200	
Sound Technician		1,200	
Total Cost of Services		\$37,730	

7. Other (list each major type and cost computation)			
type	basis/method of cost computation	Amount	
Sound Recording Equipment rental	200 day x 3 days	\$ 600	
Exhibit Fabrication	see detail attached	26,580	
Printing costs for	visitors guide & replication plans	1,500	
Xeroxing	see detail attached	180	
Word Processing	see detail attached	780	
Shipping	see detail attached	1,551	
Telephone	see detail attached	636	
Mailing	see detail attached	420	
Total Cost of Other		\$32,247	

INDIRECT COSTS		Amount
1. Rate(s) established by negotiation with Federal agency: (see additional explanation attached)		
18.2 % of \$ 65,063		\$ 11,841
35.2 % of \$ 65,062		22,902
Name of Federal agency: <u>Department of Health and Human Services</u>		
Date of negotiation agreement: _____		
2. Rate requested in attached indirect cost proposal or estimate of indirect cost rate if submission of indirect cost proposal will be delayed:		
_____ % of \$ _____		\$ _____
Total Indirect Costs		\$ 34,743

6/1/79

BUDGET SUMMARY

	<u>Cost-Share</u>	<u>NEH Request</u>	<u>Total</u>
Salaries	\$12,776	\$ 52,587	\$ 65,363
Benefits	3,833	14,634	18,467
Consultants	0	4,000	4,000
Travel	0	5,604	5,604
Supplies			
Planetarium Program		824	824
Miscellaneous	<u>1,300</u>	<u>1,500</u>	<u>2,800</u>
Subtotal Supplies	1,300	2,324	3,624
Services			
Contract with Bishop Museum	0	35,330	35,330
Draftsman	0	1,200	1,200
Sound Technician	<u>0</u>	<u>1,200</u>	<u>1,200</u>
Subtotal Services	0	37,730	37,730
Other			
Miscellaneous	432	5,235	5,667
Exhibit Fabrication	<u> </u>	<u>26,580</u>	<u>26,580</u>
Subtotal Other	432	31,815	32,247
TOTAL DIRECT COSTS	18,341	\$148,694	\$167,035
18.2% 1st 6 months	1,669	10,172	11,841
35.2% final 6 months	<u>3,228</u>	<u>19,674</u>	<u>22,902</u>
TOTAL INDIRECT COSTS	4,897	29,846	34,743
GRAND TOTAL	<u>\$23,238</u>	<u>\$178,540</u>	<u>\$201,778</u>

See note on following page.

<u>Explanation of Indirect Cost Calculation</u>	<u>Cost- Share</u>	<u>NEH Request</u>	<u>Total</u>
<u>Cost-Share Portion</u>			
1st six months			
Base = \$9,171 @ 18.2% =	\$1,669		
2nd six months			
Base = \$9,170 @ 35.2% =	<u>3,228</u>		
TOTAL INDIRECT	\$4,897		
<u>NEH Request Portion</u>			
1st six months			
Base = \$55,892 @ 18.2%		\$10,172	
2nd six months			
Base = \$55,892 @ 35.2%		<u>19,674</u>	
TOTAL INDIRECT		\$29,846	\$34,743

Indirect costs are applied to all direct costs except fabrication of the exhibition and only to the 1st \$25,000 of the subcontract.

NOTE: For the periods after July 1, 1984, the calculation of indirect costs is based upon the University's forecasted rate of 35.2% as set forth in the University's 1984/5 indirect cost proposal transmitted to Region IX, Department of Health and Human Services on January 31, 1983. The forecasted rate is used to facilitate agency program budgeting. A revised budget will be submitted (if required) once final FY 1984/5 rates are agreed to between the University and DHHS.

BUDGET EXPLANATION

	<u>Cost Share</u>	<u>NEH Request</u>	<u>Total</u>	<u>F.T.E. in Months</u>
1. <u>SALARIES</u>				
Friedman, A. Principal Investigator .10 FTE @ \$36,540/yr.		\$3,654	\$3,654	1.2
Sneider, C. Co-Director .30 FTE @ \$24,507/yr.		7,352	7,352	3.6
White, J. Exhibits Coord. .30 FTE @ \$34,230		10,269	10,269	3.6
Fredericks, J. Exhibits Technician .50 FTE @ \$28,570		14,285	14,285	6
Kitamata, W. Graphic Artist .30 FTE @ \$26,649	2,665	5,330	7,995	3.6
* Erickson, T. Computer Programmer & Activity Designer .25 FTE @ \$15,851		3,962	3,962	3
Librarian .12 FTE @ \$19,829	2,379		2,379	1.5
Kangas, J. Project Secretary .25 FTE @ \$17,300	2,595	1,730	4,325	3
Raftery, A. Administrative Asst. (Purchasing, Payroll & Grant Reports) .10 FTE @ \$19,732		1,973	1,973	1.2
Publicity & Media Relations .10 FTE @ \$29,757	2,976	0	2,976	1.2
Ando, B. Public Programs & Lectures Coordinator .10 FTE @ \$21,609	2,161	0	2,161	1.2

BUDGET EXPLANATION

Page 2

	<u>Cost Share</u>	<u>NEH Request</u>	<u>Total</u>	<u>F.T.E. in Months</u>
Assistant for Odd Jobs, installation prep, errands, etc. 500 hrs. @ \$5.46/hr.		2,730	2,730	2.87
Fairwell, K. Editor/Writer .05 FTE @ \$26,032		<u>1,302</u>	<u>1,302</u>	<u>.6</u>
<u>TOTAL SALARIES</u>	\$12,776	\$52,587	\$65,363	32.57
 2. <u>FRINGE BENEFITS</u>				
30% of all Salaries except Student (marked by *)	3,833	14,588	18,421	
1.16% of Student Salary (\$3,962)	<u>0</u>	<u>46</u>	<u>46</u>	
<u>TOTAL BENEFITS</u>	\$ 3,833	\$14,634	\$18,467	
 3. <u>CONSULTANT FEES</u>				
Thompson, Myron President, Polynesian Voyaging Society 5 days @ \$200/day		1,000	1,000	
Thompson, Nai'noa Traditional Navigator 5 days @ \$200/day		1,000	1,000	
Dawson, Lawrence Anthropologist Lowie Museum 5 days @ \$200/day		1,000	1,000	
Stroup, Dixon Oceanography Department University of Hawaii 5 days @ \$200/day		<u>1,000</u>	<u>1,000</u>	
<u>TOTAL CONSULTANT FEES</u>		\$ 4,000	\$ 4,000	
 4. <u>TRAVEL</u>				
Six Round Trips SFO/Honolulu @ \$500/ea.		3,000	3,000	

BUDGET EXPLANATION
Page 3

	<u>Cost Share</u>	<u>NEH Request</u>	<u>Total</u>
7 days per diem @ \$62/day x 6 staff		<u>2,604</u>	<u>2,604</u>
<u>TOTAL TRAVEL</u>		\$ 5,604	\$ 5,604
 5. <u>SUPPLIES & MATERIALS</u>			
Slide Duplication 100 slides @ 12¢/slide x 2 sets		24	24
2 Special Effects Projectors (1 at each site)		<u>800</u>	<u>800</u>
Subtotal		824	824
 <u>Miscellaneous</u>			
Materials for Banners 100 per sign (5 each site)		1,000	1,000
Office Supplies	1,000		1,000
Miscellaneous Signage @ \$250/site		500	500
Books on Exhibition Topics for LHS Lending Library	<u>300</u>		<u>300</u>
Subtotal	\$1,300	\$ 1,500	\$ 2,800
<u>TOTAL SUPPLIES</u>	\$1,300	\$ 2,324	\$ 3,624

6. SERVICES

BISHOP MUSEUM CONTRACT

1. Salaries

The following personnel
will commit their time
for this program:

Steiger, Walter
Planetarium Director
.6 Calendar Months

Individual salaries
are confidential and
are not listed here.

BUDGET EXPLANATION
Page 4

	<u>Cost Share</u>	<u>NEH Request</u>	<u>Total</u>
Kyselka, W. Planetarium Educator 2.9 Calendar Months			
Kirch, Patrick Anthropologist 1.2 Calendar Months			
Kemble, David Chair, Exhibits Department 2.04 Calendar Months			
Sinoto, Y. Anthropologist .6 Calendar Months			
Lilomawa, Ponifasio Exhibits Preparator 1.56 Calendar Months			
McCoy, P. Anthropologist .6 Calendar Months			
Goto, Hisao Cabinetmaker/Preparator .96 Calendar Months			
TOTAL SALARIES REQUESTED		\$17,375	\$17,375
2. <u>Benefits @ 18%</u>		3,128	3,128
3. <u>Consultant Fees</u> (all paid by LHS)			0
4. <u>Travel Costs</u> (reimbursement handled by LHS)			0
5. <u>Supplies & Materials</u> (direct costs appear in LHS budget)			0
6. <u>Services</u> (none)			0
7. <u>Other</u> Installation of Exhibition & Preparation of Exhibit Hall		300	300

Individual salaries
are confidential and
are not listed here.

BUDGET EXPLANATION

Page 5

	<u>Cost Share</u>	<u>NEH Request</u>	<u>Total</u>
Preparation of Display Cases @ \$150/ea.	_____	<u>1,200</u>	<u>1,200</u>
Subtotal		1,500	1,500
OH @ 65% S&W (\$20,503)	_____	<u>13,327</u>	<u>13,327</u>
TOTAL BISHOP MUSEUM		\$35,330	\$35,330
6. <u>SERVICES (continued)</u>			
Draftsman to prepare plans so that Exhibit can be Replicated		1,200	1,200
Sound Technician to prepare Tapes for Planetarium Program	_____	<u>1,200</u>	<u>1,200</u>
<u>TOTAL SERVICES</u>		\$37,730	\$37,730
7. <u>OTHER</u>			
Printing Costs for Visitor's Guide & Replication Guide		1,500	1,500
Sound Recording Equipment Rental @ \$200/day x 3 days		600	600
<u>Fabrication of Exhibition</u>			
6 Exhibit Carrels (3 ea. for LHS and Bishop) @ \$2,000/unit		12,000	12,000
2 Apple Computers w/Disc Drives and Color Monitors and Peripherals (1 ea. for LHS & Bishop)		8,000	8,000
Replication of Artifacts (1 set per site) @ \$500/set		1,000	1,000

BUDGET EXPLANATION
Page 6

	<u>Cost Share</u>	<u>NEH Request</u>	<u>Total</u>
Replication of Double Hulled Canoe for LHS		1,200	1,200
Construction of Custom Crates to ship Exhibit to Bishop 3 @ \$60/ea.		180	180
Large Color Photo Reproductions 20 16"x20" custom reproductions @ \$50/ea.		1,000	1,000
2 Ocean Simulation Tanks @ \$1,600/ea.		<u>3,200</u>	<u>3,200</u>
Subtotal Exhibit Fabrication		\$26,580	\$26,580
7. <u>OTHER (continued)</u>			
Shipping Costs to Bishop Museum Pick up from LHS @ \$295		295	295
plus 6½% tax		<u>19</u>	<u>19</u>
via Dependable Hawaiian Express to Zone 2, Honolulu, HI		314	314
Shipping and Wharfage 500 cu. ft. @ \$1.86/cu.ft.		930	930
Delivery 500 cu. ft. @ .59/cu. ft.		295	295
plus 4% tax		<u>12</u>	<u>12</u>
on Delivery in Hawaii		307	307
Subtotal Shipping		\$ 1,551	\$ 1,551
Telephone Basic Service \$21/mo. x 12	252		252
Long Distance 48 calls @ \$8/ea.		384	384
Mailing \$25/mo.		420	420
Xeroxing and Duplication	180		180

BUDGET EXPLANATION
Page 7

	<u>Cost Share</u>	<u>NEH Request</u>	<u>Total</u>
Word Processing & Typesetting \$70/mo. x 6 mo. 120 pages @ \$3/pg.		420 <u>360</u>	420 <u>360</u>
<u>TOTAL OTHER</u>	\$ 432	\$31,815	\$32,247

See attached Budget Notes.

BUDGET NOTE A

The Lawrence Hall of Science does not have state funds, or other permanent support funds for staff salaries. All monies required for salaries related to exhibit design and construction, and preparation of the planetarium show, must come from outside sources. Cost share contributions for this proposal come from membership dues and entrance fees.

BUDGET NOTE B

The budget for the Bernice Bishop Museum does not include amounts for non-installation costs, such as publicity, opening, or development and operation of education programs. These costs will be contributed to the project, however, as specific dollar amounts were not assigned, they were not indicated in the budget as cost-sharing contributions.

APPENDICES



B I S H O P M U S E U M

1525 BERNICE STREET • P.O. BOX 19000-A • HONOLULU, HAWAII 96819 • (808) 847-3511

18 April 1983

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Alexander Spoehr, Ph.D.
Ann S. Stubenberg
Thomas K. Toma

DIRECTOR
Edward C. Creutz, Ph.D.

Dr. Cary Sneider
Associate Director, Astronomy & Physics
Lawrence Hall of Science
University of California, Berkeley
Berkeley, California 94720

Dear Dr. Sneider:

Ref: "The Wayfinding Art: Ocean Voyaging in Polynesia."

Bishop Museum will be very pleased to collaborate with the Lawrence Hall of Science in this project. Through our cooperative activities with the Polynesian Voyaging Society, the special interest of several members of our staff and associates, and the general research interests at the Museum, there is an extensive background of involvement of the Museum in the subject defined by the title of this project.

It is worth emphasizing the obvious complementary nature of our two institutions in engaging together in a program of this sort, and the benefits that we can anticipate from this.

The Bishop Museum's support of Hōkūle'a began in 1975 with navigation training in the Planetarium. Then in 1977, and intensively for the next three years, our veteran Planetarium lecturer Will Kyselka worked with Nainoa Thompson in developing ways of correlating groups of stars in the planetarium with islands in the sea. They spent many hundreds of hours in the project - a cost that the Bishop Museum absorbed and estimated to have a value of \$20,000. The training continues with Nainoa Thompson keeping his knowledge alive through simulated voyaging.

An advisor to the Hōkūle'a project, who is also on the board of the Polynesian Voyaging Society, is the eminent anthropologist Dr. Kenneth P. Emory, of the Museum's staff. At 85 he enthusiastically continues his research at the Museum and his interest in Hōkūle'a.

page 2

Two other staff members have been involved in work that bears upon the settling of Polynesia. Each has appeared in a film, THE NAVIGATORS, being produced by anthropologist and film-maker Dr. Sanford Low, formerly of the "Odyssey" teams. He filmed Dr. Yosihiko Sinoto, Chairman of the Department of Anthropology, at an archaeological site in Fa'ahia, Huahine, where a canoe, buried in a tidal wave about A.D. 850 is being unearthed. Dr. Low also filmed Dr. Patrick Kirch at an archaeological site in Fiji, where a study of Lapita pottery is adding to our knowledge of the movement of peoples across the Pacific.

This joint project of the Lawrence Hall of Science and the Bernice P. Bishop Museum will enable people in a far wider area of the country and in much greater numbers to understand better the art of wayfinding as it began to be practiced by the Polynesians so long ago. It will also provide perspectives and appreciation of this subject in ways never before available.

In addition to Mr. Kyselka and Dr. Emory, you may be assured of the active collaboration of a number of our other staff members. These include Dr. Sinoto, Chairman of the Department of Anthropology; Archaeologists Dr. Patrick Kirch and Dr. Patrick McCoy; Dr. Walter Steiger, Manager of the Science Center and Planetarium; and Mr. David Kemble, Head of the Exhibits Department.

Some other materials are being sent to you with respect to the application being prepared for submission to the National Endowment for the Humanities.

With best wishes,

E. Creutz
Director

EC:alm

cc: Dr. Glenn Seaborg, Director, Lawrence Hall of
Science



B I S H O P M U S E U M

1355 KALIHI STREET • P.O. BOX 19000-A • HONOLULU, HAWAII 96819 • (808) 847-3511

April 15, 1983

Cary Sneider
Lawrence Hall of Science
University of California
Berkeley CA 94720

I am interested in the exhibit and program, THE
WAYFINDING ART: OCEAN VOYAGING IN POLYNESIA, a collaborative
effort of the Lawrence Hall of Science and the Bishop Museum,
and I intend to participate in the project when it is funded.

Enclosed is my resume.

Will Kyselka
Will Kyselka



B I S H O P M U S E U M

1355 KALIHI STREET • P.O. BOX 19000-A • HONOLULU, HAWAII 96819 • (808) 847-3511

April 15, 1983

Dr. Carey Sneider
Associate Director, Astronomy & Physics
LAWRENCE HALL OF SCIENCE
Berkeley, CA 94720

Dear Carey:

Your draft proposal for developing the exhibits and planetarium program entitled "The Wayfinding Art: Ocean Voyaging in Polynesia" has been reviewed by me. It seems to me to be well thought out and planned. We at the Bishop Museum, having been deeply involved with much of the research related to Polynesian migration and the Hokule'a project, are very interested in participating in this program you propose.

I personally will be happy to participate and contribute what I can to the success of the program, if it is funded, as a co-developer of the planetarium program and interactive exhibit. At present I feel that I cannot commit more than about 5% of my time to the project.

If there is anything else we can do to assist in the submission of the proposal, please let us know.

Yours sincerely,

Walter R. Steiger, Manager
BISHOP MUSEUM SCIENCE CENTER

WRS:bj

Enc:



B I S H O P M U S E U M

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April 15, 1983

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Berkeley CA 94720

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effort of the Lawrence Hall of Science and the Bishop Museum,
and I intend to participate in the project when it is funded.

Enclosed is my resume.

Yoshihiko Sinoto
Yoshihiko Sinoto



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and I intend to participate in the project when it is funded.

Enclosed is my resume.

Pat Kirch



B I S H O P M U S E U M

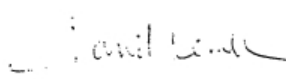
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April 15, 1983

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effort of the Lawrence Hall of Science and the Bishop Museum,
and I intend to participate in the project when it is funded.

Enclosed is my resume.


David Kemble



B I S H O P . M U S E U M

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April 15, 1983

Cary Sneider
Lawrence Hall of Science
University of California
Berkeley CA 94720

I am interested in the exhibit and program, THE
WAYFINDING ART: OCEAN VOYAGING IN POLYNESIA, a collaborative
effort of the Lawrence Hall of Science and the Bishop Museum,
and I intend to participate in the project when it is funded.

Enclosed is my resume.

Patrick C. McCoy

POLYNESIAN VOYAGING SOCIETY

418 Halemaumau St., Honolulu HI 96821

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Cary Sneider
Lawrence Hall of Science
University of California
Berkeley, CA 94720

Dear Dr. Sneider:

I have just assumed presidency of the Polynesian Voyaging Society, and, on behalf of the Society am happy to endorse the collaborative effort of the Lawrence Hall of Science and the Bishop Museum, THE WAYFINDING ART: OCEAN VOYAGING IN POLYNESIA.

Hokule'a was built by the Polynesian Voyaging Society and launched in 1975. Since then it has made two round-trips to Tahiti, attempted another, and investigated the feasibility of Kealahakiki Channel serving the ancients as a "path to Tahiti."

Presently Hokule'a is visiting all the islands in Hawaii on a two months' educational venture under a grant from the Hawaii Foundation for the Culture and the Arts. By bringing this living treasure of Hawaii's voyaging past to adults--and especially school students--we hope to increase the knowledge of the people of this state of their unique heritage.

The cost of research is high. The building of the canoe, the voyages to Tahiti in 1976 and 1980, the educational ventures, the current performance tests of the canoe being conducted by the Hawaii Institute of Geophysics and the Department of Oceanography--all this amounts to well over \$400,000. And maintenance costs continue.

Large donations to the Polynesian Voyaging Society for the Hokule'a project came from the Kamehameha Schools/Bishop Estate, and the Legislature of the State of Hawaii. Large in-kind donations have come from the Bishop Museum's Planetarium, the AMFAC Boatyard for drydocking services, and a host of other organizations.

HAWAII

TAHITI

BICENTENNIAL VOYAGE OF REDISCOVERY
HOE AKU I KA WA'A

Cary Sneider
April 21, 1983
Page 2

The idea of recapturing Hawaii's sailing heritage was so compelling to the people of Hawaii that they also gave generously of time, food, and money.

The Polynesian Voyaging Society is interested in a wider view of the voyages of Hokule'a and its contribution to "experimental archaeology." The success of Hokule'a in venturing over old sea routes verifies the work of archaeologists, anthropologists, botanists, and linguists at the Bishop Museum and elsewhere in documenting the movement of the Polynesians throughout the Pacific.

Most important, of course, is making the knowledge of the wayfinding art and the richness of Polynesian culture available to a wider audience.

I enthusiastically endorse the project, THE WAYFINDING ART: OCEAN VOYAGING IN POLYNESIA, and assure you that the Polynesian Voyaging Society will do its utmost in furthering this effort available.

Sincerely,

Myron B. Thompson
Myron B. Thompson, President
Polynesian Voyaging Society

POLYNESIAN VOYAGING SOCIETY

BOX 6037 / HONOLULU / HAWAII 96818 / (808) 841-3966

April 15, 1983

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ED KEALANAHELE
REVEREND
JOHN KRUSE
FRANCIS KAINOA LEE
DAVID S.K. LYMAN, III
SIEGFRIED RAMLER

Cary Snider
Lawrence Hall of Science
UC
Berkeley CA 94720

I am interested in the exhibit and program, THE WAYFINDING ART: OCEAN VOYAGING IN POLYNESIA, for I have made such a voyage.

When the project is funded I'll be glad to participate in it as best I can.

Nainoa Thompson
Nainoa Thompson
Lee Tysen
Society Polynesian
Voyaging Society

HAWAII



TAHITI

BICENTENNIAL VOYAGE OF REDISCOVERY
HOE AKU I KA WA'A



University of Hawaii at Manoa

Department of Oceanography
Division of Natural Sciences
1000 Pope Road • Honolulu, Hawaii 96822
Telephone: (808) 948-7633 • Cable Address: UNIHAW

April 18, 1983

Dr. Cary Sneider
Associate Director, Astronomy and Physics
Lawrence Hall of Science
University of California
Berkeley, CA 94720

Dear Dr. Sneider:

Will Kyselka has asked whether I'd be interested in participating in the Bishop Museum/Lawrence Hall of Science project on wayfinding and island culture. I would, indeed, for a variety of reasons.

I have followed the Polynesian Voyaging Society's work, and the remarkable accomplishments of the canoe Hokule'a, with great interest from the very start. This interest stems from a long-standing fascination with the history of exploration and ocean navigation in general, and with the Pacific islands in particular. Four years ago I became personally involved, and as chairman of the PVS Research Committee I helped plan the navigation documentation for the 1980 Tahiti trip. I am currently helping (with Nainoa Thompson and others) to work the detailed results up for publication. I also now sit on the PVS Board of Directors.

The 1980 Tahiti voyage coincided with the most intensive scientific study of equatorial winds and currents in history; the University of Hawaii's part in this work concentrated on just that part of the ocean which the canoe was traversing. I was a P.I. for one segment of the scientific work--involving oceanography from Navy aircraft--and am involved in analysis of results, which we will subsequently relate to the canoe's progress. This oceanographic connection also provided the satellite beacon (from Scripps Institution of Oceanography, one of the project participants) which we put aboard Hokule'a, to give us a record of her true track.

We are also currently involved in a project to run instrumented sailing trials with Hokule'a, to document her sailing characteristics under varying conditions of wind, sea, and point of sailing.

AN EQUAL OPPORTUNITY EMPLOYER

Dr. Cary Sneider


-2-

April 18, 1983

In my professional capacity as Associate Professor and Chairman of this department, I am especially concerned with teaching scientific concepts about the ocean and atmosphere to non-scientists; my introductory course, Science of the Sea, enrolls 500-600 each semester. The educational aspects of the proposed project thus interest me deeply.

I would very much appreciate being able to contribute to this challenging and important project.

Sincerely,



Edward D. Stroup
Chairman, Department of Oceanography

EDS:jhm

cc: W. Kyselka

Lowie Museum of Anthropology



University of California, Berkeley
Kroeber Hall, Bancroft Way and College Avenue, 94720
Telephone: 415-642-3681

April 20, 1983

Cary Sneider
Associate Director
Astronomy and Physics Education
Lawrence Hall of Science

Dear Dr. Sneider,

I will be pleased to serve as a consultant on the information communicated in the exhibits and planetarium program for the proposed exhibition The Wayfinding Art: Ocean Voyaging in Polynesia. It is my understanding that consultation activities may take up to five days of my time.

Yours sincerely,

Lawrence E. Dawson
Lawrence E. Dawson
Research Anthropologist

LED/mm

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SANTA BARBARA • SANTA CRUZ

LAWRENCE HALL OF SCIENCE
A RESEARCH CENTER IN SCIENCE EDUCATION
(415-642-4193)

BERKELEY, CALIFORNIA 94720

April 20, 1983

National Endowment for the Humanities
806 15th Street N.W.
Washington, D.C. 20506

Dear Associates:

The three undersigned have read and contributed to the proposal
"The Wayfinding Art: Ocean Voyaging in Polynesia," and we are
enthusiastic about participating in the manner described in the
proposal.

A handwritten signature in cursive script, reading 'Alan J. Friedman'.

Alan J. Friedman
Director
Astronomy and Physics

A handwritten signature in cursive script, reading 'Cary I. Sneider'.

Cary I. Sneider
Associate Director
Astronomy and Physics

A handwritten signature in cursive script, reading 'Jennifer White'.

Jennifer White
Director
Exhibits

LETTERS EXPRESSING INTEREST IN REPLICATION

Following are three letters expressing interest in replicating the planetarium program, exhibition, or both. The replication guide will provide explicit instructions for these institutions and a list of costs. The letter from Wendy Pollock of ASTC refers to a plan to create a traveling version of the exhibit and planetarium program which may be undertaken after the materials have been developed and utilized at the Lawrence Hall of Science and Bishop Museum.

Association of
Science-Technology
Centers



1016 Sixteenth Street,
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Washington, DC
20036-5788
(202) 452-0655

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Seattle, WA 98109

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Ontario Science Centre
Toronto, Ontario, Canada

November 17, 1982

Mr. Cary Sneider
Lawrence Hall of Science
Centennial Drive
University of California
Berkeley, CA 94720

Dear Cary:

It was good to talk with you last week and to hear about your plans for a traveling exhibition and planetarium show about early Polynesian navigation. What an imaginative theme! It ties together so many disciplines: astronomy, physics, anthropology, history. And the multimedia format promises to be particularly engaging.

A few quick calls to some ASTC members have confirmed my feeling that interest in the project will be very strong. The participatory nature of the planetarium show seems to be a particularly attractive -- and to most, novel -- feature.

Incidentally, I've discovered that William Davenport, the Oceanic specialist from the University Museum (Philadelphia) whom I mentioned to you, is now at the Bishop Museum for a year. Perhaps he is already involved in your project. If not, I understand that he would be well-qualified to offer an anthropological perspective. Ben Finney is another name I might suggest -- an anthropologist familiar with Polynesian navigation. Unfortunately, I'm not certain of his current location, but the AAA should be able to help.

I assume that several months of planning will precede design, fabrication, and finally circulation. ASTC would be pleased to offer advice during this period, and to ultimately manage a museum tour. When the appropriate time comes, I can send you a short description of what we would propose to do, with a budget. Let me know when you need this.

Meanwhile, please call if you think we can help in any way. And do keep us informed of your progress.

Sincerely,

Wendy Pollock
Coordinator
Traveling Exhibition Service

EAST SIDE EDUCATIONAL PARK

Independence High School

1776 EDUCATIONAL PARK DRIVE
SAN JOSE, CALIFORNIA 95133
(408) 926-1776

GUY C. KLITGAARD, PRINCIPAL

December 2, 1982

Dr. Cary Sneider
Associate Director of Astronomy and Physics
Lawrence Hall of Science
University of California
Berkeley, CA 94720

For several years, the Astronomy and Physics Department at Lawrence Hall of Science has been a leader in participatory planetarium programs. Your workshops, materials and programs are of great assistance to the planetarium community, and have caused many planetarium directors to change their show style to better achieve educational objectives. At the Sierra College Planetarium and at the Independence Planetarium, I have successfully adopted your programs, "Finding Your Star" and "The Red Planet, Mars," for use with students in grades 4 through 12. Each year at the Independence Planetarium, 60 to 70 percent of our programs are participatory. I find that programs which require the active involvement of students are better received, and are more well-suited to elementary and high school curricula.

I understand that you are requesting funding to develop a series of exhibits and a participatory planetarium program on Polynesian navigation, "The Way Finding Art: Ocean Voyaging in Polynesia." I look forward to adopting the program at the Independence Planetarium. Such a program is especially appropriate for our schools and community. The Independence Planetarium serves East Side Union High School District and numerous elementary and intermediate schools. The high school district has over 21,400 students. In 1981-1982, 39.1% were Caucasian, 32.8 Hispanic, 10% Black, 16.2% Asian, Pacific Islander and Filipino, and 1.9% Alaskan and American Indian. The district actively supports multi-cultural education. "The Way Finding Art: Ocean Voyaging in Polynesia" will find direct application within our District goals, and as a part of the on-going, multi-cultural education project at Independence High School. Each month, the school emphasizes a particular culture with special programs, exhibits, and activities. Initially, I plan to use "The Way Finding Art" as a special program during a Pacific Islanders' month. Later, the program will be offered as part of the "World Cultures" course required for all students.

I look forward to using "The Way Finding Art: Ocean Voyaging in Polynesia."

Sincerely,



Mrs. Edna DeVore
Planetarium Director, East Side Union High School District

pb

THE STRENGTH OF AMERICA

EAST SIDE UNION HIGH SCHOOL DISTRICT

SUPERINTENDENT - Harry Reynolds

It is the policy of the East Side Union High School District not to discriminate on the basis of sex, age, religion, race, national origin or handicapping condition in its educational programs and activities or in the recruitment and employment of personnel.

11 November 1982

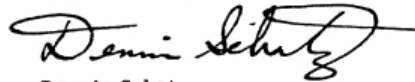
Dr. Cary Schnieder
Lawrence Hall of Science
University of California at Berkeley
Berkeley, California 94720

Dear Cary:

I was very excited to hear about your proposed project concerning Polynesian navigation and sailing techniques, "Journey by Starlight: Ocean Voyaging in Ancient Polynesia." As you know the Pacific Science Center is an institution dedicated to the use of participatory planetarium programs. There are a few institutions who are qualified to produce such programs, and we are delighted that the Lawrence Hall of Science, a leader in the field, is proposing such a program. We are especially interested in the possibility of a traveling exhibition to accompany it. I know of no other project which has both a planetarium program and complementary exhibit. The coupling of these two should make the project inviting to many institutions around the country.

The Pacific Science Center would of course be delighted to present such a planetarium program and display the exhibit when it is available.

Sincerely yours,



Dennis Schatz
Director of Science

DS/lmk



April 19, 1983

NAVIGATION EXHIBIT

Questionnaire

<u>Age:</u>	10 - 19 -- 83	<u>Male:</u> 64	<u>Female:</u> 69	<u>Education:</u> Elementary -- 13
	20 - 29 -- 21			(highest Jr. High -- 20
	30 - 39 -- 26			year of High -- 18
	40 - 49 -- 13			school) College -- 48
	50 - 59 -- 2			Graduate -- 30
	60 - 69 -- 6			

1. Modern sailors use stars and instruments to navigate: Yes: 107 No: 21
2. How many years ago were the Hawaiian Islands settled?
a. 500 (22) b. 1,000 (30) c. 1,500 (20) d. 2,000 (24) e. 3,000 (17)
f. 10,000 (17)
3. People who settled the Hawaiian Islands:
a. were entirely dependent on drift when sailing between islands (13)
b. navigated between nearby islands using instruments made of sticks (33)
c. navigated across hundreds of miles of ocean with no instruments (51)
d. I have no idea how they traveled between islands (37)
4. Polynesians live on islands extended over an area of ocean the size of:
a. Alameda County (6) b. Oregon (6) c. California (4)
d. Continental US (14) e. North America (22) f. One-half the entire earth (9)
5. Which of the following are examples of "technology"?
a. computers and airplanes (118) b. pencils and paper (79)
c. stone fireplaces (71) d. a method for finding directions using the stars (79)
7. We are considering a new exhibit on ocean voyaging in Ancient Polynesia.
How interested are you in this exhibit topic?
a. not at all (8) b. somewhat (45) c. very interested (64)

April 19, 1983

NAVIGATION EXHIBIT

Questionnaire

Question 6: Long ago, the Ancient Polynesians invented canoes with two hulls lashed together. How do you think this invention might have affected their culture?

A Sampling of Responses:

There houses may be built the same way.

It allowed them to travel over larger areas of ocean and to develop more sub-cultures.

Greatly.

It made it possible to travel longer distances.

It gave them greater range of travel.

Increased trade possibilities, more interaction and less isolation.

I have not given this much thought.

Balance.

Expanded travel.

It enabled speedy travel, possibly unifying(?) culture.

Allowed interchange of ideas, thought, technology, etc.

Travel, meeting other tribes.

More stable than one hull. More freedom in exploration; more cargo.

Made it widespread, allowed carrying of goods over the ocean.

One side would be used to ride in and the other side would be used to carry goods.

A stable and fast transportation between islands fosters merchant seamen as in Europe and middle east; expands the culture.

Better able to travel further distances--more "mixing" of cultures--knowledge of other people, places, cultures.

Allowed longer trips--extend range and rough water capabilities.

Allowed culture to emigrate, to develop extended trade patterns.

Broadened their horizons--literally.

Allowed them to meet with other groups on other islands, shared ideas, inter-marry.

Made travel between islands possible thereby allowing different tribes to intermix.

I think it may have expanded their travel and included different groups.

Increase mobility and thus increased contact between islands. This most likely made their culture more cosmopolitan.

It may have made more distant travel possible, unifying a number of islands, increasing trade.

NAVIGATION EXHIBIT
Questionnaire
Question 6 (continued)

Extra stability might have led them to sail and fish more.

Balance.

More aware of astronomy. Balance.

The invented canoes helped the Polynesians go to deep water.

More people could travel longer distances together.

Not much.

Made crossing great distances easier--more contact with other islands.

Gave them greater mobility--could fish and travel much farther.

Yes!

You can put more people in one boat and they need it for transportation from island to island.

Team work, dependency.

More stable craft with more storage area would allow longer voyages.

People could travel safer and faster.

Enable cross culturization.

Not much.

Question 8: What would you like to learn about ocean voyaging in Ancient Polynesia?

What kind of weapons they used.

How they navigated.

I would like to learn what boats were used for fishing purposes and did they invent boats that carried cargo or lots of people.

The sequence of migrations and times thereof. How they navigated.

The design of their sailboats from an evolutionary standpoint.

Ship models. A field trip there!

Since I live in Ohio, I won't be around to learn! It sounds like something the kids would be very interested in.

How they carried, hunted food. Their legends.

Celestial navigation -- assumption(?). Foods they consumed? Where they traveled.

Why, where, when, what, how, etc.....

What supplies did they have. Why did they move from island to island?

It enabled speedy travel, possibly unifying cultures.

Length of journey, how voyage prepared for, legends, songs, etc.

How they did it, what they did, more about their culture, etc.

Anything -- celestial or other navigation.

NAVIGATION EXHIBIT

Questionnaire

Question 8 (continued)

Kind of boats. Places people were--maps etc.--what they transported--objects, food, etc. ports(?) of their culture.

What myths connected with it, what set them off voyaging? Did they ever return to their origin? Did whole families go, or mostly explorers? What was the ecological impact on the islands they settled.

What did they eat? How did they survive? Religion? Beliefs? Culture? Friendly? Language? Climate? Hardships?

The "how they do it," navigation, food storage, ship repair, weather forecasting, seamanship.

Please answer all the above questions--as you can see I know very little.

I think such an exhibit would be too static. You need to continue developing "hands on" exhibits.

Scientific/technological contribution of this development.

How polynesians were able to navigate; their ability to use "natural" methods to determine their locations and directions.

Process--problem/solution ideas--interrelationships.

All of these things I obviously don't know--something colorful, and visual that would give us the chance to "navigate" using a technique you would describe.

Methods of navigation.

I don't know.

How were food and water provided for.

I would like to know about the boats and how the distant navigation was possible. Was it deliberate or an accidental adventure?

Navigational methods. Boat construction. Where they went.

About how far did they travel to find the island of there(sp) liking.

Exactly how it was done.

How they made their boats and how they worked.

Who settled Easter Island and where did those statues come from. How many "major" migrations into Polynesia were there and which direction did they come from (east/west). Did they (Polynesians) ever reach N/S America?

Types of boats. Navigation techniques.

Would also like exhibit on pre-Columbian contacts with Americas from Africa.

I'm not really sure. It probably depends(sp) on how interesting the exhibit is.

How they got around the different islands. What instruments used. What means of other travel was available.

How they made their boats and how they worked.

The Hawaiians(sp) and Polynesians(sp) are both exploited groups. Please let people know. They have beautiful culture. How about some current as well as ancient news. Kwaijen Atol(sp)? Weapons Testing? Culture?

PLEASE HELP US PLAN NEW EXHIBITS!

We are conducting a survey on what visitors might already know about how ancient peoples navigated the oceans, and to find out if there is interest in a new exhibit on this topic. Please take a few minutes to fill out this questionnaire and return it to the box. Thank you!

Age _____ Sex _____ Education (highest year of schooling) _____

1. Modern sailors use stars and instruments to navigate. Yes _____ No _____

2. How many years ago were the Hawaiian Islands settled?

a. 500 b. 1,000 c. 1,500 d. 2,000 e. 3,000 f. 10,000

3. People who settled the Hawaiian Islands:

- a. were entirely dependent on drift when sailing between islands
- b. navigated between nearby islands using instruments made of sticks
- c. navigated across hundreds of miles of ocean with no instruments
- d. I have no idea how they traveled between islands.

4. Polynesians live on islands extended over an area of ocean the size of:

- a. Alameda County b. Oregon c. California d. Continental US
- e. North America f. One half of the entire earth

5. Which of the following are examples of "technology"?
(circle all that apply)

- a. computers and airplanes b. pencils and paper c. stone fireplaces
- d. a method for finding directions using the stars

6. Long ago, the Ancient Polynesians invented canoes with two
nulls lashed together. How do you think this invention might
have affected their culture?

7. We are considering a new exhibit on ocean voyaging in Ancient
Polynesia. How interested are you in this exhibit topic?

- a. not at all b. somewhat c. very interested

8. What would you like to learn about ocean voyaging in Ancient Polynesia?



POLYNESIAN VOYAGING SOCIETY

440 A Puamamane St.
Honolulu, HI 96821
Phone: 373-9387
July 20, 1989

*Enclosed is
my article
by [unclear]*

Dear Friends and Family of PVS —

Hokule'a is now winding up the summer program for the D.O.E. and Kamehameha Schools throughout the state which provides us a chance to reflect on the goals we have been fortunate enough to reach in the past, as well as those ahead in the future. My purpose for writing to you is to inform you of a major house-keeping effort underway which, hopefully, you might be able to participate in.

A complete inventory and cataloging of the materials generated during the voyages of Hokule'a is being undertaken at this time, thanks to funding provided by the Alu Like Native Hawaiian Library Project. The final outcome of this effort by Lela Goodell will be a complete archival record of Hokule'a's voyages in print, photographs, charts, chants, etc. If there is anything that you may have collected personally over the years which you believe could add to the value of these archives, we would all appreciate your contribution.

Please mail them directly to Ms. Lela Goodell, c/o Midkiff Learning Center, Kamehameha Schools, Kapalama Heights, Honolulu 96817. For those of you on Oahu, I will be glad to come by and pick up anything you might want to add. Call me at home at 373-9387. We are trying to round up this collection by the end of July.

Anything you wish to contribute will become part of Hawaii's history through Hokule'a remarkable accomplishments. Please call me if you have any questions.

Aloha,

Laura Shanks



VOYAGE OF REDISCOVERY