

# CREW TRAINING PROGRAM

CHAIRMAN  
STEERING COMMITTEE

| TRAINING  |  |   |  |  |  |
|---|--|---|--|--|--|
| VESSEL  | HEALTH   | SAFETY  | RESEARCH   | CLASS STUDIES  | FIELD STUDIES<br>OFFICER'S CORE  |
| <u>I. VESSEL ORIENTATION.</u><br><u>II. COVERAGE OF PARTS AND THEIR FUNCTIONS.</u><br><u>III. MAINTENANCE IN TERMS OF SEAWORTHINESS</u>   | <u>I. PHYSICAL:</u><br>• DISEASE<br>• INJURY<br>• SICKNESS<br>• PREVENTIVE MEDICINE<br>• PHYSICAL EXAMINATION<br><u>II. PSYCHOLOGICAL:</u><br>• STRESS<br>• WHAT TO EXPECT<br>• HOW TO COPE<br>• PSYCHOLOGICAL SCREENING<br><u>III. PHYSICAL CONDITIONING PROGRAM.</u> | <u>I. CLASSROOM STUDIES:</u><br>• BASIC FIRST AID<br>• SURVIVAL TRAINING<br>• HAZARDS OF VOYAGING<br>• EMERGENCY PROCEDURES<br>• COMMUNICATIONS<br>• EMERGENCY EQUIPMENT<br><u>II. AT SEA:</u><br>• SURVIVAL TECHNIQUES<br>• HAZARDS OF VOYAGING<br>• EMERGENCY PROCEDURES AND DRILLS<br>• OPERATION OF SAFETY EQUIPMENT:<br>- HOW TO USE<br>- WHEN TO USE<br>- WHERE TO STORE<br>• COMMUNICATIONS TRAINING | <u>I. PROJECTS</u><br>• NAVIGATION<br>• CANOE PERFORMANCE<br>• FOOD EXPERIMENTS<br>• FISHING<br>• DEPARTURE ROUTE<br>• ANCHOR MATERIALS<br><u>II. DOCUMENTATION</u><br>• WHAT TO DOCUMENT<br>• WHERE TO DOCUMENT<br>• HOW TO OPERATE EQUIPMENT | <u>I. SUBJECTS</u><br>• CULTURAL HERITAGE<br>• NARRATIVE THEORY<br>• BASIC SAILING THEORY<br>• HORIZON ORIENTATION<br>• SIMULATED VOYAGING<br>• CLIMATOLOGY<br>• NAVIGATION<br>• CANOE PERFORMANCE<br>• BASIC SEAMANSHIP | <u>I. SHORT SAILS (DAY)</u><br>• BASIC SEAMANSHIP<br>• MECHANICS OF:<br>- SAILING<br>- HORIZON<br>- SIGHTING<br>- SAIL SETTING<br><u>II. EXTENDED SAILING (INTRA-ISLAND)</u><br>• SIMULATED VOYAGING<br>• LIFE AT SEA<br>• WATCH DUTIES<br>• LEARN THE CANOE<br><u>III. SAFETY</u><br>• PRACTICE EMERGENCY PROCEDURES & DRILLS<br>• OPERATION AND PROPER STORAGE OF SAFETY EQUIPMENT |
| • DRYDOCKING \$6,000.00<br>• MATERIALS/SALES<br>• SAFETY EQUIP. 5,000.00<br>• PAUL WEATHER EQUIP. 600.00<br>• COMMUNICATION 10,200.00<br>• FOOD PREPARATION 6,000.00<br>• ESCORT VESSEL 2,000.00<br><b>TOTAL: 29,800.00</b> | • HEALTH \$500.00  | • SAFETY \$1,000.00   | • TRAINING \$300.00<br>• EQUIPMENT 2,700.00<br>• CONTINGENCY FUND 10,000.00<br><b>TOTAL: \$13,000.00</b>   | • CLASS STUDIES \$300.00   | • OPERATIONAL COST \$500.00<br>• MICROBORG VENTURE 15,500.00<br>• CONTINGENCY FUND 3,000.00<br><b>TOTAL: \$19,000.00</b>   |
| <b>\$80,200.00 TOTAL BUDGET</b>   |  |   | <b>\$63,600.00 TOTAL -</b>   |  |  |

# PROGRAM

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| PLANNING                                       |   |   |   |  |
|--|---|---|---|--|
| ES   | FIELD STUDIES<br>OFFICER'S CORE   | CREW SELECTION<br>STEERING COMMITTEE  | EDUCATION   | TAHITI LIAISON/<br>EXPENSES  |
| ORY  | <p><u>I. SHORT SAILS (DAY)</u></p> <ul style="list-style-type: none"> <li>BASIC REMANSHIP</li> <li>MECHANICS OF:               <ul style="list-style-type: none"> <li>SAILING</li> <li>HOKULEA</li> <li>STEERING</li> <li>SAIL SETTING</li> </ul> </li> </ul> <p><u>II. EXTENDED SAILING</u><br/>(INTER-ISLAND)</p> <ul style="list-style-type: none"> <li>SIMULATED VOYAGING</li> <li>LIFE AT SEA</li> <li>WATCH DUTIES</li> <li>LEARN THE CANOE</li> </ul> <p><u>III. SAFETY</u></p> <ul style="list-style-type: none"> <li>PRACTICE EMERGENCY PROCEDURES &amp; DRILLS</li> <li>OPERATION AND PROPER STORAGE OF SAFETY EQUIPMENT</li> </ul> | <p><u>I. CREW SELECTION DESIGN</u></p> <ul style="list-style-type: none"> <li>OFFICER'S CORE</li> <li>CREW MAN CORE</li> <li>CRITERIA</li> </ul> <p><u>II. FINAL CREW SELECTION</u></p> <ul style="list-style-type: none"> <li>CRITERIA</li> <li>SELECTION PROCESS</li> </ul> <p><u>III. COMMUNICATIONS</u></p> <ul style="list-style-type: none"> <li>RESPONSIBLE FOR COMMUNICATION BETWEEN STEERING COMMITTEE AND CREW</li> </ul> | <p><u>I. DOCUMENTATION (ALL INFORMATION REGARDING VOYAGING)</u></p> <ul style="list-style-type: none"> <li>CLASS LECTURES</li> <li>SAFETY PROGRAM</li> <li>HEALTH</li> <li>VESSEL PERFORMANCE</li> <li>OCEAN STUDIES</li> <li>RESOURCES PROJECTS</li> <li>VOYAGE RESULTS</li> </ul> <p><u>II. TRANSCRIPTION/ORGANIZATION</u></p> <ul style="list-style-type: none"> <li>CONVERT DATA INTO EDUCATIONAL UNITS</li> </ul> <p><u>III. DISSEMINATION</u></p> <ul style="list-style-type: none"> <li>INFORMATION MADE AVAILABLE TO PUBLIC:               <ul style="list-style-type: none"> <li>FILMS</li> <li>SLIDES</li> <li>TAPES</li> <li>ARTICLES</li> <li>LECTURES</li> </ul> </li> </ul> | <p><u>I. ACCOMMODATIONS</u></p> <ul style="list-style-type: none"> <li>TAHITI AIR FARE</li> <li>LODGING IN TAHITI</li> <li>MOORING HOKULEA</li> <li>REPAIR WORK ON HOKULEA</li> <li>TRANSPORTATION</li> </ul> <p><u>II. CONTINGENCY PLAN</u></p> <ul style="list-style-type: none"> <li>IF HOKULEA NEEDS TO STAY IN TAHITI FOR 1 YEAR</li> </ul> <p><u>III. CREW FAMILY COMPLETION</u></p> |
| ICE  | <p>200.00</p> <ul style="list-style-type: none"> <li>OPERATIONAL COST \$500.00</li> <li>HOKULEA VENTURE 15,500.00</li> <li>CONTINGENCY FUND 3,000.00</li> <li>TOTAL \$19,000.00</li> </ul>  | <p>COMMUNICATIONS:</p> <ul style="list-style-type: none"> <li>LETTERS</li> <li>PHONE CALLS \$200.00</li> </ul>  | <p>EDUCATIONAL COMMITTEE</p> <ul style="list-style-type: none"> <li>\$3,000.00</li> </ul>   | <p>CONTINGENCY FUND \$5,000.00</p> <ul style="list-style-type: none"> <li>AIRFARE 7,500.00</li> <li>LODGING 500.00</li> <li>MOORING 400.00</li> <li>TOTAL \$13,400.00</li> </ul>   |
| <p>DEPT. TOTAL BUDGET</p> <p>00.00 TOTAL -</p> |   | <p>PLANNING-DEPT. TOTAL BUDGET</p> <p>\$16,600.00 TOTAL</p>   |   |  |

after 1980  
see p 3

Training Program

### HOKULEA TRAINING PROGRAM

#### Three Divisions:

1. Pre-sail orientation
2. Rigging and preparation for sail
3. Sailing

#### 1. Pre-Sail Orientation (for people not familiar with sailing on the Hokulea.)

- . Assemble on Hokulea.
- . Passed out handouts on basic theory on sailing, in general, and specifically, <sup>on sailing</sup> the Hokulea.
- . Took crew through quick excursion of the canoe covering the areas of
  - a. compartments
  - b. hole
  - c. hulls
  - d. both sails
  - e. sine + missile sweeps
  - f. steering blades and steering compartments.

type of sweeps

- . Went into a more detailed, but still basic discussion of sailing Hokulea by <sup>arranging</sup> putting the crew <sup>to</sup> in 5 official stations.

Station 1 and 2 were the front and back sails. We went over the various parts, their function, and what ~~was the~~ material they were made of:

- a. mast
- b. mast step
- c. spar
- d. boom
- e. mast head

#### Lines:

- a. stays
- b. shrouds
- c. halyards
- d. triesting
- e. sheets

#### Sail:

- a. design
- b. its purpose and effectiveness

#### Station 3 - steering sweep.

- a. its construction (material); how it was rigged.
- b. purpose
- c. effectiveness (what is it doing to the canoe.)
- d. when to use the sweep
- e. how to operate it.
- f. what are its dangers.

Station 4 - Steering Blade

- a. its construction (material; how it is rigged)
- b. its purpose
- c. effectiveness (what it is doing to the canoe)
- d. under what conditions is it used
- e. how to operate the blade within the steering compartment
- f. what are its dangers
- g. how to use it to supplement the steering sweep

Station 5 - duties on canoe (a more detailed inspection of canoe), areas covered

- a. pumping hulls
- b. fishing
- c. storage of food, water, supplies, equipment
- d. ~~lakes and rigging~~ <sup>lashing</sup>
- e. railing
- f. tow lines
- g. anchor and anchor lines
- h. man overboard procedures
- i. positioning to avoid accidental jibe dangers

Short Discussion on:

- . Maneuver
  - a. come about
  - b. gybe
- . Changing direction in respect to wind and swell:
  - a. changes in sail setting
  - b. changes in steering method
  - c. performance of Hokulea
  - d. description and performance of Hokulea in
    - . close reach
    - . beam reach
    - . broad reach
    - . running free

2. Rigging and Preparing for Sail.

- . assembly of crew
- . raising of sails
- . tying of lines
- . dropping of sails and triesting of sails to make sure operable
- . preparation of steering equipment
- . storage of food, water, and safety equipment and medical kit so that everyone knows where things are.
- . organizing crew by dividing them up into 5 groups, one for every station
- . Pule



- . At each of the 5 stations, would be a crew member from either one of the voyages to or from Tahiti to do the instruction of that particular station. The material covered was basically what each instructor felt like teaching.

The crew was at one particular station to receive instruction similar to the format given in the "pre-sail orientation" but much more detailed and also actually doing it.

Each group was rotated after spending approximately 1/2 hour at each station and completing a maneuver (either coming about or gybing) and re-setting the canoe for its new "tack".

It was also ATTEMPTED but not really possible to have the canoe change its direction in respect to the wind and swell direction under the categories of close reach, beam reach, broad reach, and running free to show the changes in sail setting and steering methods and techniques.

- . Bringing canoe back to dock: Each group remained at their station. Group on station 5 prepared two line mooring lines.

Whole crew participated in dropping sails, taking care of equipment, and cleaning Hokulea.

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NOTES FOR TRANSMITTAL TO SELECTION COMMITTEE

5/2/79

1. Attached is a draft letter to send to prospective crew candidates. We regard this draft as a first try. Please improve on our effort, or ignore it if it does not appear helpful!

2. The relevant dates, in our view, are:

|                 |   |
|-----------------|---|
| 7 May 1979      | Letter of invitation sent   |
| 21 May          | notification of selection sent  |
| 4 June          | primary course begins   |
| 30 Sept         | primary course ends. Selection of two crews, with alternates and officers is made.        |
| 7 Oct           | Advanced course begins  |
| 31 Jan 1980     | Advanced course ends. Adjustment of crew lists and officer assignments made at this time. |
| 1 Feb - 1 March | Preparations for voyage.  |

3. As we understand it, the Selection Committee will have responsibility for final crew selection and for officer selection. Since this will partly depend on performance of candidates in the primary and advanced classroom and practical work, we would recommend that members of the Selection Committee participate in development and conduct of the training program, to ensure that sufficient information is available to them for making evaluations.



Guy Rothwell  
for Kyselka, Rothwell, Somsen, Stroup, Thompson

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Polynesian Voyaging Society

Dear Hokule'a Crew Candidate,

Please let this letter serve as an invitation to participate in a comprehensive training program for prospective crew members of the Hokule'a in the next planned open-ocean voyage from Hawaii to Tahiti or from Tahiti to Hawaii.

It is hoped that you will consider this invitation both as an opportunity and as a responsibility. You will have the opportunity to learn new skills, to improve on skills that you already have, and to share your knowledge with others.

If you choose to accept this invitation, you will have the responsibility of having made a serious commitment to the Hokule'a, the members of the Polynesian Voyaging Society, and to the people of Hawaii.

Your responsibilities will include prompt attendance at each one of the training courses offered for your benefit.\* These classes will be conducted in at least six different locations: Classroom studies at Kam re on Oahu, at the Bishop Museum-Planetarium in Honolulu, Field Studies for star-identification at Makapu Point and Kaena Point, Oahu, dockside on board the Hokule'a at Pier 12, Honolulu Harbor, and training cruises on board the Hokule'a.

The classroom work will be held two nights a week, \_\_\_\_\_ and \_\_\_\_\_ nights starting the first week of June 1979. We will normally meet for two hours starting promptly at \_\_\_\_\_ p.m. We expect to meet for classroom studies for ten consecutive weeks. (Please refer to the enclosed schedule of courses).

\*(If you are forced to miss any class because of an absolutely binding commitment, it will be your responsibility to let the instructor know about your absence before the class begins, either by phone or by mail. Further, you should then make arrangements to receive the information that you missed at that class session).

Your prompt attendance at all classes is otherwise required and will serve as evidence of your commitment towards the goal of sailing the Hokule'a safely to Tahiti and back to Hawaii.

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Training voyages on the Hokule'a at sea and dockside classes on the Hokule'a will be held on weekends. While you will not be required to sail every weekend, you should keep in mind the value of training time at sea on board the Hokule'a.

Final crew selection will be made in October of 1979 to determine two crews: one to sail to Tahiti in March of 1980. Another crew will guide the Hokule'a back to Hawaii in June of 1980. Advanced training for the two crews chosen to make the voyages will begin in October and continue until the time of the voyage.

Please consider this carefully and let us know of your intentions by mail or by telephone no later than : \_\_\_\_\_.

*Mark Gossard* —

*Overall line requirements.*

Sincerely,

Polynesian Voyaging Society  
at the Bishop Museum  
P.O. Box 6037  
Honolulu, Hawaii 96818

(808) 841-3966

MEMO To Chairman, Steering Committee 2 May, 1979  
Polynesian Voyaging Society

FROM Kyselka, Rothwell, Somsen, Stroup, Thompson

SUBJ Recommendations for Crew Candidate Training Course

We transmit herewith the results of two meetings during which the crew training schedule contained in the Proposal and Plan for Hokule'a Voyage to Tahiti and Return, 1980, was examined and revised.

*what about crews?*

We would like to emphasize that the attached material was developed as the minimum practical level of instruction that would at the same time be possible to achieve in the short time available between now and the date (1 October 1979) when two voyaging crews must be selected.

Although no attempt was made to detail an advanced course for selected crews, we feel that several topics listed in the Proposal and Plan were inappropriate for a primary course, and should be included in the advanced course. Among these are radio communication, first aid, practical navigation, recording and documentation of the voyage and of experiments, care and control of food and water, and certain emergency procedures.

We would also like to suggest some other thoughts we had while discussing training:

1. It is very important that this training program be started as soon as possible, preferably by June 4. This will require that candidate selection be made without delay.
2. Since in effect we are conducting a school, we should select a principal. We recommend Jan Dill.
3. Instructors should be encouraged to develop lecture notes in advance of each class session, and each session should be tape-recorded. This has two benefits: to help outside island candidates and those who cannot attend all sessions; and to form a syllabus for later training and for community education purposes.

Notes:

*This is a minimal amount of required training*

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MEMO To Steering Committee p. 2 5/2/79

4. It will be necessary to evaluate each student. Because conventional classroom evaluation such as tests and quizzes may be inappropriate, instructor evaluation will be required. In addition, it will be possible to form evaluations during day sails and overnight sails. Whatever form of evaluation is used, it should be coordinated with the Crew Selection Committee, which in any case will have the final say.

5. We also recommend that development and conduct of this training course be coordinated with the education committee.

Respectfully submitted:



Guy Rothwell

PRIMARY COURSE: List of Subjects

1. Orientation: Goals and Objectives of Polynesian Voyaging Society. Objectives of the planned voyage. [Outline of the training and selection process.] D.H./y

Instructor: PVS President or Board Member 2 hours

2. Vessel Orientation: History of the Hokulea. Construction. Nomenclature. Vessel sailing characteristics. Basic seamanship. This session classroom only.

Instructor: Wally Froiseth 2 hours

3. Basic Seamanship: Dockside familiarization with vessel, sail handling, etc. Two groups, weekend mornings.

Instructor: Wally Froiseth 2 hours

4. Safety and Emergency Procedures: Demonstrations of emergency equipment, when and how to use. Man overboard. Maneuvers and procedures for same plus shortened sail, damaged rigging, hull or equipment. Distress procedures, including injured crew member.

Instructor: Steve Somsen 4 hours

5. Culture: Migration theories. Sailing Routes, canoe types. Traditions, legends and historical data. Non-instrumental navigation, what it is, how it works.

Instructors: Abe Piana'a, Alex Spoehr 4 hours

6. Navigation:

Nautical Astronomy Will Kyselka 2 hours

Sun, Moon, Stars:  
direction, latitude,  
longitude. Will Kyselka 2 hours

Star Identification Will Kyselka 4 hours

Field trips to Kaena Pt.,  
Makapuu, for star ident. Kyselka, Thompson,  
Somsen, Stroup.  
2 evenings (mornings?)

6. Navigation (continued)

Daytime appearance of sky,  
cloud forms, wave and swell.  
Migratory birds, flotsam.

Instructor: \_\_\_\_\_ 2 hours  
Na'ina

7. Climatology of the Region:

Weather patterns in eastern Pacific  
Winds, general circulation, seasonal  
changes.  
Currents, waves, and swell.  
Applications to projected sailing  
route and season.

Instructor: D. Stroup 4 hours

8. Long Distance Voyaging:

Organization and discipline  
Food, living conditions  
Personal gear  
Incidents at sea  
Keeping of personal logs

Instructors: Crew members of former trips 4 hours  
Gordon Pianaia

9. Birds and Marine Life:

Migratory birds. Species, routes and seasons.  
Inshore birds. Species and habits.  
Identification. Use of pictures, stuffed  
birds, if possible. Significance in navigation.

Instructor: to be selected. Dr. Andy Pserger 2 hours  
Russ Apple

10. Health:

Physical and emotional well-being under stresses  
of voyage.  
Do's and don't's. Food, sleep, exposure, what to do  
in case of illness.

Instructors: Charman Akina, Ben Young, Abe Pianaia. 2 hours

11. Research:

Research goals of voyage. Basis of experimental  
design. Techniques. Recording and documentation.  
Research product. Significance of research results.



11. Research (continued)

Instructor: G. Rothwell

2 hours

12. Review:

A total of eight hours has been provided for review of material presented. Scheduling and method of presentation are left to the instructors to arrange by mutual agreement.

Included in this time is student evaluation. Further discussion is needed to determine a suitable method for evaluation, due to the very wide range of educational backgrounds expected among the students.

13. In addition to evening classroom sessions, it is recommended that all students in the primary course obtain at least one session on the vessel at dockside, one day sail, and one overnight sail during the course. Because these "practical" sessions will be subject to weather and individual commitments, scheduling will have to be done 'on the fly' during the course.

14. Evaluation: The purpose of the primary course is twofold: First, to provide a common background of knowledge among all the crew candidates, and Second, to assist in evaluation of each candidate for later crew selection. For these reasons, it should be emphasized to each candidate that his attendance at all or as many sessions as possible, is very important.

Notes:

Suggested classroom schedule is 2 hours Monday evenings and 2 hours Wednesday evenings, allowing shift to other nights by agreement among candidates and instructors.

A total of 36 hours of classroom time is listed. In addition, two late night field trips, a morning dockside session, a one-day sail, and a two-day sail are included.

Use of the Planetarium at Bishop Museum and classroom space at Kamehameha Schools is required.

Instructors should be strongly encouraged to prepare lecture notes in advance for handout to candidates.

Notes (continued)

Instructors listed with each session are tentative: not all of those named have been contacted to determine their willingness to serve.

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PROPOSED TRAINING SCHEDULE FOR PRIMARY COURSE -- 1 June 1979 thru 30 September, 1979

|                        | PRIMARY COURSE--All applicants |         |         |      | ADVANCED--Two selected crews                          |
|------------------------|--------------------------------|---------|---------|------|---|
|                        | June                           | July    | August  | Sept | October   |
| Orientation            | *                              |         |         |      | Begin advanced crew training including:               |
| Vessel Orientation     | *                              |         |         |      |   |
| Basic Seamanship       | *                              |         |         |      | Inter-island trips                                    |
| Safety                 | **                             |         |         |      | At-sea navigation                                     |
| Culture                |                                | **      |         |      | Radio communication                                   |
| Navigation             |                                | ** ** * | ** ** * |      | advanced seamanship                                   |
| Climatology            |                                |         | *       | *    | Practical use of material presented in primary course |
| Long Distance Voyaging |                                |         | *       | *    |   |
| Birds and Marine Life  |                                |         |         | *    | Development of crew skills                            |
| Research               |                                |         |         | *    |   |
| Health                 |                                |         |         | *    |   |
| Review                 |                                |         | ****    | **** |   |
| Milestones             | *Crew Selection, First cut     |         |         |      | *Crew evaluation, Crew Selection, Second cut          |

Note: No schedule has been prepared for the advanced course. Inclusive dates will be 1 October thru 31 March 1980.

M E M O R A N D U M

August 10, 1979

TO: CREW CANDIDATES  
FROM: MARLENE  
SUBJ: WEEKEND SAIL

Friday, September 21 - Monday, September 24, 1979  
Friday, October 5, - Monday, October 8, 1979

The Crew Selection Committee requires all crew candidates to participate in one of the above weekend sails. Please note that there is a possibility that you might not return to port until Monday evening. So please make all the necessary arrangements with your place of employment.

Estimated time of departure from Pier 12 for both sail dates will be 6:30 P.M. and you are expected to be at Pier 12 PROMPTLY at 5:30 P.M.

Captain Gordon Piianaia will be giving you further details on voyage preparation on Monday, September 10, 1979, 7:30 P.M. Kamehameha School, Keoua 101.

A sign-up sheet will be circulated at your class on Monday, August 13, 1979.

For the outer island candidates, please indicate on the attached sheet which sail you will be able to participate in and return your reply in the self-addressed envelope. At this time, outer-island candidates will be expected to provide their own round-trip transportation to Honolulu for the sail.

If you have any questions, please call me at the office or at home.

Mahalo.



cc; Crew Selection Committee  
Gordon Piianaia  
Jan Dill

### Crew Selection

A pool of 31 prospective crew members will be established and trained from which final selection for the Hawaii-Tahiti voyage will be selected.

Each candidate will be assessed according to the following criteria.

1. Health  
Pass a physical examination
2. Experience  
Some understanding of and familiarity of the ocean is desirable although not absolutely necessary, for the specifics will be learned in the training program.
3. Compatibility  
Ability to work well with others. No serious personality problems.
4. Ability and willingness to learn  
Eagerness to seek out knowledge, curiosity, receptivity to demands of research, commitment to the ideals of the Polynesian Voyaging Society.

The trainees selected according to the criteria above will be subjected to an intensive hundred-hour training program. Final selection for the proposed 1980 Hawaii-Tahiti voyage will be made with the following criteria guiding the process:

1. Health  
Pass a physical examination and complete a physical conditioning program.

2. Knowledge and practical experience in the operation of Hokule'a.
3. Knowledge of Hokule'a--parts and functions.
4. Knowledge of safety  
First aid, preventive medicine, emergency procedures, hazards of voyaging, survival training on land and sea, emergency equipment and its use.
5. Background knowledge  
Heritage of ancient seamanship and voyaging, migration theory, basic sailing and theory, noninstrumental navigation, climatology, fishing.
6. Compatibility  
Through experiences in sailing together the individual finds the reality of stresses and strains in living closely with others. A demonstrated ability to work well with others under pressures.
7. Ability to learn  
Openness to new ideas and ways. Each crew member will be involved in a research project and possibly receive special training. He will be expected to adequately carry out the assignment and documentation as a contribution to furthering our knowledge of ancient voyaging.

### Officer Selection

Those appointed to officer rank will have met all the requirements for crew member. In addition, they will have the capability of performing specific tasks.

1. The officers will include the captain, first mate/watch captain, instrumental navigator, noninstrumental navigator, and medical doctor.
2. Build two or three groups of qualified individuals who have a demonstrated competence for the job. They would also perform as teachers in the training program.

### Training

Crew training needs to begin as soon as possible so that the selection process may proceed.

The ideal instructor/resource person would be Mau Piailug. An attempt to contact him has not yet been successful. Adequate funding would have to be secured in such an eventuality.

### Areas of Study

The following include some of the possible areas of study.

1. Canoe performance  
Lee drift, windward performance, maximum efficient water line (carrying capacity), speed under various conditions, efficiency of various sail designs,
2. Noninstrumental navigation  
Testing research ideas en route. First-hand experience and generation of ideas of the clues that ancient man had related to his survival at sea.
3. Food preservation  
Types of food, storage, nutritional values.
4. Physical and mental health study  
Stresses in living together in small quarters for extended period of time.
5. Fishing  
Comparative study of modern lures and techniques with those of ancient times.
6. Survival at sea  
Anticipating the wind, wave, and weather from reading the signs in the sea.

## I. ORIENTATION

- A. Purpose of my lecture is to familiarize you with:
  - 1. What the Polynesian Voyaging Society is;
  - 2. The 1980 Tahiti Project; and
  - 3. The personal commitment each of you will have to make, should you wish to be a candidate for this Voyage.
- B. This lecture is the first of a series of lectures aimed at providing each of you with a background which the Board of Directors and Tahiti Steering feel that is important for you to realize.

## II. THE POLYNESIAN VOYAGING SOCIETY

- A. Is a non-profit organization whose basic purpose is to learn about open ocean voyaging using ancient polynesian vessels -- Hokule'a.
  - 1. Non-profit -- tax exempt/donation
  - 2. Organizational structure and individuals responsible
- B. Historially speaking:
  - 1. It was found<sup>d</sup> by:
    - Ben Finney, anthropologist
    - Herb Kane, an artist
    - Tommy Homes, a modern-day ocean adventurer and waterman
  - 2. The first trip was in 1976:
    - 1974, the year of the Canoe
    - 1975, the year of the Man
    - 1976, the year of the Voyage
  - 3. Despite 3 hard years of planning, the biggest fallacy was the inability to transform the open ocean voyaging data into a form beneficial to the State of Hawaii
  - 4. 1978 failure



### III. WHY ANOTHER TAHITI TRIP?

- A. First, to collect that data which should have been collected, then digested, and made available to Hawaii's people in order that they may learn about their rich voyaging history.
- B. Unlike the first and second voyages, the 1980 trip will be manned, operated, and tested by a Hawaiian-born crew. Its purpose is to see whether a Hawaiian-born navigator can direct Hokule'a's destiny toward first landfall, whether it be Tahiti, Marquesas, <sup>Tuamotu's</sup> Can this be done by inexperienced crew members?
- C. Third, to gather, digest and disseminate information concerning open ocean voyaging. In order to achieve these goals each crew member will be assigned tasks of collecting certain data, such as photographing the environmental surroundings, or logging canoe performance <sup>data</sup>.
- D. Fourth, to provide experience to local individuals for the purpose of sharing, teaching and understanding an age-old tradition.
- E. And fifth, to foster social and economic development with out polynesian counter parts using a "grass roots" approach.

### IV. THE COMMITMENT

- A. To qualify as a candidate for this trip you must be willing to sacrifice your own personal time in order that you learn what is expected of you.
  - 1. Formalized training, classes and instructions
  - 2. Very little time for loved ones
  - 3. The ability to financially support yourself and family during the training phase, voyage and aftermath.
- B. Furthermore, after the voyage you will be required to participate in workshops, seminars and projects involving lecturing and practical teaching of what was learned while you sailed Hokule'a across the endless miles of our Pacific Ocean.
  - 1. Include Speakers Bureau
  - 2. Scientific research projects -- canoe performance, food preservation, or methods of hand line fishing.

- C. Only if you are willing to make this sacrifice will the Crew Selection Committee consider your application.

V. THE END

- A. Once you have made this commitment and fully understand what is required, you will be considered for crew selection for the proposed voyage.
- B. Phase One consists of formalized training and education familiarizing you with background information for such a trip. For instance, the present schedule calls for \_\_\_\_\_.
- C. Phase Two will then be directed to more open ocean training with only those candidates who the Crew Selection Committee have indicated which persons have completed Phase I and will be qualified to proceed on with Phase II. At this time two (2) crews will be selected including officers, crewmen and alternates. It is very important to understand that several positions will have been pre-selected, such as the Captain, First Mate, Non Instrumental Navigator and whatever must be designated. Then the remaining open slots will be selected from this array of candidate by the Crew Selection Committee.

VI. CLOSING

- A. Oriented you with the goals and objections of the PVS and the function and objectives of the Steering Committee.
- B. Further, I have tried to make it very clear of what will be required of each of you, should you elect to try out for the position of a crew member of this proposed voyage.
- C. Lastly, that if you are selected you will be charged with the duty and responsibility of assuring the PVS and people of this State, that you would be willing to carry forth any commitments made by you in furthering the goals and objectives of the PVS.
- D. Questions.

TRAINING PROGRAM

TRAINING GOALS: General Statement

It is the goal of the training program to mold a group of selected individuals into a competent, efficient, and motivated crew and replacements capable of carrying out the research, voyaging, and cultural goals planned for the 1980 sail.

It is of prime importance that each participant is prepared physically, psychologically, and technically to carry out his specific duties and responsibilities on the voyage. As in the days of ancient Polynesian voyaging, each individual will have a critical role and responsibility to fulfill. The success of the voyage and the safety of the crew will depend upon his/her carrying out these responsibilities in cooperation with his/her fellow crew members. The training program will prepare each individual to accept the challenge of their responsibilities and assure as much as possible the molding of an efficient team capable of meeting the technical and psychological needs of a non-instrumental navigation of the Pacific.

Much of the outlined content which follows deals with training programs aimed at the technical and physical competence levels of the individuals in the various areas, such as navigation, safety, sailing, etc. They should be self-explanatory. Two aspects which are not elaborated upon in the following documents, yet, are crucial to the success of the training program should be mentioned here.

First, it is a goal of the training program to provide all the participants with a thorough cultural and historical

TRAINING GOALS (continued)

understanding of the foundations of non-instrumental voyaging. Impart, this implies the creation of a certain "mind set" among crew members which will allow them a better contemporary understanding of the traditional concepts, and perspectives, and technology used by the ancient Polynesian voyagers.

A second important goal of the training program which goes beyond the physical and technical preparation of the crew is the crucial element of teamwork and mutual dependence among crew members. It is most necessary that each crew member understands and is willing to depend upon the strengths of his/her fellow crew members. Though insufficient, the term "teamwork" describes part of this goal for the training program, but it is a teamwork that goes beyond the mechanical working together of individuals and points to the psychological unit which is necessary for a successful voyage. The classroom and field studies are thus not only frameworks for technical learning, but at the same time they are organized to provide the trainees the shared experiences of dealing with and solving different problems and situations as a unit.

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#### Training Activities:

The training program for the 1980 voyage of the Hokule'a is divided into two general overlapping categories: (a) classroom programs and (b) field training.

(a) Classroom programs: After the selection of the trainee group there will be instituted a program of approximately eighty-five to one hundred classroom hours which each trainee will complete successfully before he/she can be considered for final crew selection. It is planned that classroom work will be completed as soon as schedules permit, but it will probably not be finished before the field training commences. When necessary, all topics covered in the classroom will find practical application in the field studies.

The general areas of classroom studies and the approximate hours contemplated are the following (see attached detailed plans for additional information):

1. Vessel: (15 hours) Basic nomenclature, structure, function of vessel parts and general sailing theory and practice. Understanding of vessel's capabilities and limitation.
2. Safety: (10 hours) General emergency procedures and precautions. Introduction to basic survival techniques and considerations. Conditions and situations to be aware of.
3. Navigation: (15 hours) General principles of non-instrumental navigation including work at Planetarium. Two or three trainees will be selected to concentrate on navigation as their specialty..
4. Cultural heritage: (15 hours) Basic history of Polynesian voyaging and their cultural foundations.
5. Research/Documentation: (10 hours) Basic research techniques and the use of camera, tape, and written documentation methods.
6. Communication: (8 hours) Principles of communication equipment and procedures. Designated individuals

Training Activities: (continued)

6. Communication: (continued) will receive additional intensive training.
7. Health/Physical and psychological conditioning: (20 hours)  
General health considerations, including food regime;  
basic first aid techniques (elected individuals to  
receive additional intensive training); psychological  
dimensions of voyage; basic physical conditioning.

(b) Field excercises: Commencing as soon as feasible and continuing with increasing regularity until the final sail will be a series of field training excercising on the Hokule'a. These training excercises will include all on board activities of the trainees beginning with in port orientations, progressing to day and weekend sails prior to the 1980 voyage.

The field excercises will be oriented toward the practical application of classroom principles and the development of the efficient teamwork of the trainees. Each individual will have the opportunity of developing in the field the specific responsibilities he/she would be called upon to carry out during the actual voyage.

It is envisioned that by October, 1979, a specific crew and alternates will be selected and training activities from that point until the actual sailing will almost be exclusively conducted aboard the vessel.

In summary, it is the intention of the training program to prepare each crew member technically, physically, and psychologically to efficiently and cooperatively carry out his responsibilities on the 1980 voyage of the Hokule'a. To insure this goal it is the

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Training Activities: (continued)

intention of the training committee to insure that each member of the final crew has successfully completed a training curriculum of a minimum of approximately one hundred classroom hours and 300 - 400 hours of field exercises.

See attached documents for additional information.

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**NOTES RECEIVED** 111

YAGING  
search  
Data  
Collecting

Discussion  
process



1979. crew list  
weekend sail

M E M O R A N D U M

August 10, 1979

TO: CREW CANDIDATES  
FROM: MARLENE  
SUBJ: WEEKEND SAIL

Friday, September 21 - Monday, September 24, 1979  
Friday, October 5, - Monday, October 8, 1979

The Crew Selection Committee requires all crew candidates to participate in one of the above weekend sails. Please note that there is a possibility that you might not return to port until Monday evening. So please make all the necessary arrangements with your place of employment.

Estimated time of departure from Pier 12 for both sail dates will be 6:30 P.M. and you are expected to be at Pier 12 PROMPTLY at 5:30 P.M.

Captain Gordon Piianaia will be giving you further details on voyage preparation on Monday, September 10, 1979, 7:30 P.M. Kamehameha School, Keoua 101.

A sign-up sheet will be circulated at your class on Monday, August 13, 1979.

For the outer island candidates, please indicate on the attached sheet which sail you will be able to participate in and return your reply in the self-addressed envelope. At this time, outer-island candidates will be expected to provide their own round-trip transportation to Honolulu for the sail.

If you have any questions, please call me at the office or at home.

Mahalo.



cc; Crew Selection Committee  
Gordon Piianaia  
Jan Dill

CREW CANDIDATE TRAINING

SEPTEMBER

Wednesday, September 5

Course: Safety and Nomenclature  
Instructor: Steve Somsen and Gordon Piianaia  
Place: Pier 12/Hokule'a  
Time: 5:30 P.M.

Monday, September 10

Course: Research and Voyage Preparation  
Instructor: Guy Rothwell and Gordon Piianaia  
Place: Kamehameha School/Keoua 101  
Time: 7:30 P.M.

Tuesday, September 11

Physical Examinations

Place: Medical Group  
Dr. Charman Akina  
Time: 6:30 P.M.

Wednesday, September 12

Course: Migratory Birds  
Instructor: Craig Harrison  
Place: Kamehameha School/Keoua 101  
Time: 7:30 P.M.

Saturday, September 15

Day Sail and Workday

Place: Pier 12/Hokule'a  
Time: 8:00 A.M.

September (continued)

Monday, September 17

Course:        Navigation

Instructor: Will Kyselka and Nainoa Thompson

Place: Planetarium

Time: 7:30 P.M.

Friday, September 21 - Monday, September 24

## Weekend Sail

Place: Pier 12/Hokule'a

Time: 5:30 P.M.

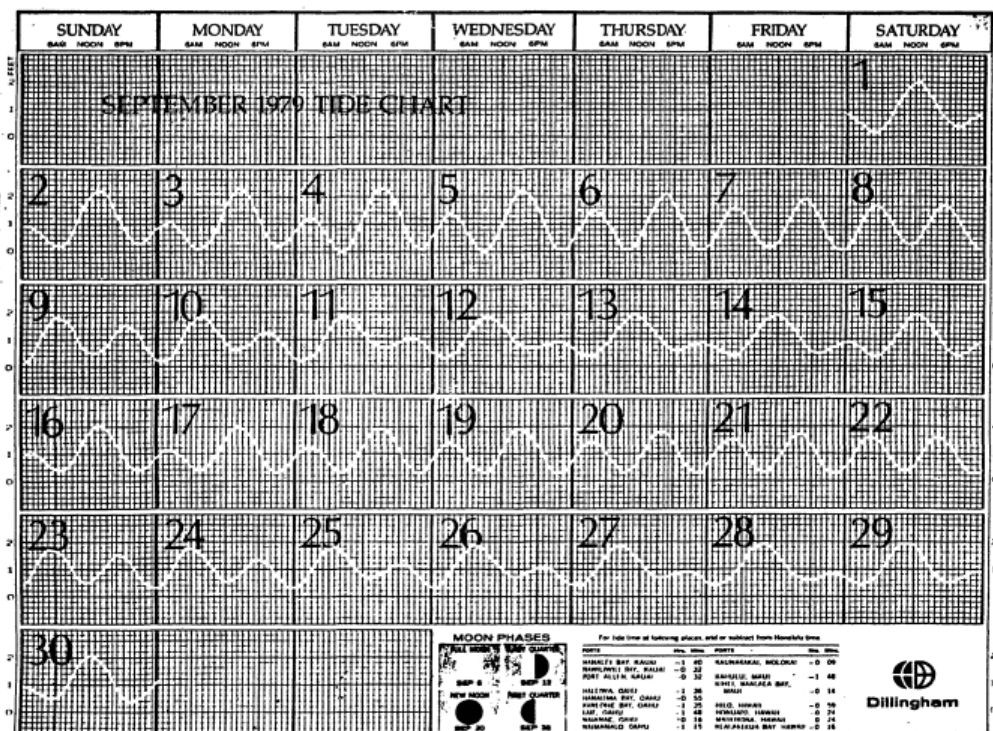
## OCTOBER

Friday, October 5 - Monday, October 8

## Weekend Sail

Place: Pier 12/Hokule'a

Time: 5:30 P.M.



MEMO To Chairman, Steering Committee 2 May, 1979  
Polynesian Voyaging Society

FROM Kyselka, Rothwell, Somsen, Stroup, Thompson

SUBJ Recommendations for Crew Candidate Training Course

We transmit herewith the results of two meetings during which the crew training schedule contained in the Proposal and Plan for Hokule'a Voyage to Tahiti and Return, 1980, was examined and revised.

We would like to emphasize that the attached material was developed as the minimum practical level of instruction that would at the same time be possible to achieve in the short time available between now and the date (1 October 1979) when two voyaging crews must be selected.

*How about  
3 crews?*

Although no attempt was made to detail an advanced course for selected crews, we feel that several topics listed in the Proposal and Plan were inappropriate for a primary course, and should be included in the advanced course. Among these are radio communication, first aid, practical navigation, recording and documentation of the voyage and of experiments, care and control of food and water, and certain emergency procedures.

We would also like to suggest some other thoughts we had while discussing training:

1. It is very important that this training program be started as soon as possible, preferably by June 4. This will require that candidate selection be made without delay.
2. Since in effect we are conducting a school, we should select a principal. We recommend Jan Dill. ✓
3. Instructors should be encouraged to develop lecture notes in advance of each class session, and each session should be tape-recorded. This has two benefits: to help outside island candidates and those who cannot attend all sessions; and to form a syllabus for later training and for community education purposes.

Notes:

*This is a minimal amount of required training*

4. It will be necessary to evaluate each student. Because conventional classroom evaluation such as tests and quizzes may be inappropriate, instructor evaluation will be required. In addition, it will be possible to form evaluations during day sails and overnight sails. Whatever form of evaluation is used, it should be coordinated with the Crew Selection Committee, which in any case will have the final say.

5. We also recommend that development and conduct of this training course be coordinated with the education committee.

Respectfully submitted:



Guy Rothwell

PRIMARY COURSE: List of Subjects

1. Orientation: Goals and Objectives of Polynesian Voyaging Society. Objectives of the planned voyage. [Outline of the training and selection process.] *Dill/you*

Instructor: PVS President or Board Member 2 hours

2. Vessel Orientation: History of the Hokulea. Construction. Nomenclature. Vessel sailing characteristics. Basic seamanship. This session classroom only.

Instructor: Wally Froiseth 2 hours

3. Basic Seamanship: Dockside familiarization with vessel, sail handling, etc. Two groups, weekend mornings.

Instructor: Wally Froiseth *any get him involved* 2 hours

4. Safety and Emergency Procedures: Demonstrations of emergency equipment, when and how to use. Man overboard. Maneuvers and procedures for same plus shortened sail, damaged rigging, hull or equipment. Distress procedures, including injured crew member.

Instructor: Steve Somsen 4 hours

5. Culture: Migration theories. Sailing Routes, canoe types. Traditions, legends and historical data. Non-instrumental navigation, what it is, how it works.

Instructors: Abe Pianaea, Alex Spoehr 4 hours

6. Navigation:

Nautical Astronomy Will Kyselka 2 hours

Sun, Moon, Stars:  
direction, latitude,  
longitude. Will Kyselka 2 hours

Star Identification Will Kyselka 4 hours

Field trips to Kaena Pt.,  
Makapuu, for star ident. Kyselka, Thompson,  
Somsen, Stroup.  
2 evenings(mornings?)

6. Navigation (continued)

Daytime appearance of sky,  
cloud forms, wave and swell.  
Migratory birds, flotsam.

Instructor: \_\_\_\_\_ 2 hours  
*Naina*

7. Climatology of the Region:

Weather patterns in eastern Pacific  
Winds, general circulation, seasonal  
changes.  
Currents, waves, and swell.  
Applications to projected sailing  
route and season.

Instructor: D. Stroup

4 hours

8. Long Distance Voyaging:

Organization and discipline  
Food, living conditions  
Personal gear  
Incidents at sea  
Keeping of personal logs

Instructors: Crew members of former trips  
*Gordon Pianaia*

4 hours

9. Birds and Marine Life:

Migratory birds. Species, routes and seasons.  
Inshore birds. Species and habits.  
Identification. Use of pictures, stuffed  
birds if possible. Significance in navigation.

Instructor: to be selected.

*Dr. Andy Szegyer*  
*Pure Apple*

2 hours

10. Health:

Physical and emotional well-being under stresses  
of voyage.  
Do's and don't's. Food, sleep, exposure, what to do  
in case of illness.

Instructors: Charman Akina, Ben Young, *Albe Pianaia* - 2 hours

11. Research:

Research goals of voyage. Basis of experimental  
design. Techniques. Recording and documentation.  
Research product. Significance of research results.



#### 11. Research (continued)

Instructor: G. Rothwell

2 hours

#### 12. Review:

A total of eight hours has been provided for review of material presented. Scheduling and method of presentation are left to the instructors to arrange by mutual agreement.

Included in this time is student evaluation. Further discussion is needed to determine a suitable method for evaluation, due to the very wide range of educational backgrounds expected among the students.

13. In addition to evening classroom sessions, it is recommended that all students in the primary course obtain at least one session on the vessel at dockside, one day sail, and one overnight sail during the course. Because these "practical" sessions will be subject to weather and individual commitments, scheduling will have to be done 'on the fly' during the course.

14. Evaluation: The purpose of the primary course is twofold: First, to provide a common background of knowledge among all the crew candidates, and Second, to assist in evaluation of each candidate for later crew selection. For these reasons, it should be emphasized to each candidate that his attendance at all or as many sessions as possible, is very important.

#### Notes:

Suggested classroom schedule is 2 hours Monday evenings and 2 hours Wednesday evenings, allowing shift to other nights by agreement among candidates and instructors.

A total of 36 hours of classroom time is listed. In addition, two late night field trips, a morning dockside session, a one-day sail, and a two-day sail are included.

Use of the Planetarium at Bishop Museum and classroom space at Kamehameha Schools is required.

Instructors should be strongly encouraged to prepare lecture notes in advance for handout to candidates.

#### Notes (continued)

Instructors listed with each session are tentative: not all of those named have been contacted to determine their willingness to serve.

PROPOSED TRAINING SCHEDULE FOR PRIMARY COURSE -- 1 June 1979 thru 30 September, 1979

|                        | PRIMARY COURSE-All applicants |         |         |      | ADVANCED-Two selected crews   |
|------------------------|-------------------------------|---------|---------|------|---|
|                        | June                          | July    | August  | Sept | October   |
| Orientation            | *                             |         |         |      | Begin advanced crew training including:<br>Inter-island trips<br>At-sea navigation<br>Radio communication<br>advanced seamanship<br>Practical use of material presented in primary course<br>Development of crew skills |
| Vessel Orientation     | *                             |         |         |      |   |
| Basic Seamanship       | *                             |         |         |      |   |
| Safety                 | **                            |         |         |      |   |
| Culture                |                               | **      |         |      |   |
| Navigation             |                               | ** ** * | ** ** * |      |   |
| Climatology            |                               |         | *       | *    |   |
| Long Distance Voyaging |                               |         | *       | *    |   |
| Birds and Marine Life  |                               |         |         | *    |   |
| Research               |                               |         |         | *    |   |
| Health                 |                               |         |         | *    |   |
| Review                 |                               |         | ****    | **** |   |
| Milestones             | *Crew Selection,<br>First cut |         |         |      | *Crew evaluation,<br>Crew Selection,<br>Second cut  |

Note: No schedule has been prepared for the advanced course. Inclusive dates will be 1 October thru 31 March 1980.

DOCUMENTS CAPTURED AS RECEIVED

*Crew Training  
1980*

Hokule'a's Sail Trips

September 21 - October 5, 1979

Personal Items Needed

- |     |   |   |
|-----|---|---|
| 1.  | 2 | Pairs of shorts                         |
| 2.  | 1 | Pair long pants                         |
| 3.  | 1 | Pair rubber shoes (Optional)            |
| 4.  | 1 | Pair slippers                           |
| 5.  | 3 | Shirts (Tee-shirts or long sleeves)     |
| 6.  |   | Toiletry (soap, razor, tooth paste etc) |
| 7.  | 3 | Underwear (Optional)                    |
| 8.  | 1 | Jacket                                  |
| 9.  | 1 | Foul weather gear                       |
| 10. | 2 | Towels                                  |
| 11. | 1 | Sleeping bag                            |
| 12. | 1 | Carry type knife                        |
| 13. | 1 | Watch cap (Optional)                    |
| 14. | 1 | Sweater (Optional)                      |

Note: No drinking of alcoholic beverage or use of unprescribed drugs will be permitted on board.  
There will be no illegal drugs brought onboard.

LONG DISTANCE VOYAGING : Organization and discipline, food, living conditions, personal gear, incidents at sea, keeping of personal logs.

The following information is just that. It is not to tell you how to prepare for a long distance trip; it is a sharing of some feelings that I have about going to sea.

There are certainly a number of definitions for the term 'long distance voyaging' and I think we can basically agree that it includes 1) a great distance, and 2) going from one point to another (or other points). The greater the distance one travels, the longer the voyage. Naturally, a long distance voyage differs with purpose and type of vessel.

The just completed Transpac Race is a good example of a collection of sailing vessels (mostly monohulls and a handful of multihulls) of varying lengths, weights and designs. They all had the same purpose however - to get to Hawai'i from L.A. as fast as they could. This type of 'long distance ocean racing' is distinct from 'long distance voyaging', although some of the boats entered in this year's race felt like they were on a 'long distance voyage'.

I don't know what criteria establishes a voyage as being one of long distance, but I feel that anything over 1,000 miles would qualify. Perhaps the smaller the vessel, the less the distance. Something like a distance of 999 miles.

Other types of long distance voyages can be classified under such headings as cruising and/or recreational, research and/or scientific, commercial, and those of the foolhardy type. The voyages planned for 1980 with the Hōkūle'a would fall under the research and/or scientific type of heading (which is in a sense educational too). Certainly, there are those who would place us under the 'foolhardy' category. Oh, well, in every fleet there is generally one Admiral Knowitall who verbalizes profusely with oral diarrhea. Thank God its a disease which is generally isolated and not contagious to those who come into contact with it.

A number of people have asked me why we are going to Tahiti again? For me it is more than a project or an adventure, it is a challenge. The 1976 trip to Tahiti had the good fortune to have a Micronesian navigator aboard. This time we're going to do it on our own. I feel strongly that given the proper time and chance the 1976 trip could have succeeded with a Hawaiian navigator. We'll never know will we? Hell, we know that we don't have a Mau, Hippour, Cowan, Repunlub and Repunlab amongst us, but we're not dumb either. The PVS took the time to build a canoe and this wasn't

done overnight. A lot of research and effort went into the 'Year Of The Canoe'. The PVS set up its criteria and selected its crew - 'The Year Of The Crew'. Then in 1976, there was 'The Year Of The Voyage'. We all know of its successes; we all know of its failures. I think they could have made an effort to have 'The Year Of The Crew and Navigator'. As it turned out, we had the great Mau from Satawal, David Lewis from New Zealand and Rodo Williams from Tahiti. I have great respect for these men of the sea who have shared a part of their lives with us.

I've drifted off course a bit and just want to say that it isn't easy to answer the people who question another trip to Tahiti. It's like sending a man to the moon. For me it's a tremendous challenge; there are not too many challenges of this caliber available to any of us. They didn't have a Mau when they went to the moon, but they were willing to gather their talents and resources together. They were willing to make an effort and take that initial chance. They were also willing to risk failure.

#### ORGANIZATION

When I think of organization I think of primarily two groups. The larger is the PVS with its various committees. It is this group that is responsible for sponsoring the 1980 trips. Out of this group also comes the educational efforts of the PVS. Education is the backbone of everything we do with the Polynesian Voyaging Society.

A smaller organization, and one pertinent to all of us here this evening, are the two crews that will be selected to make the 1980 trips. The manner in which these two crews are organized will enlarge depend upon 1) the type of experiments and research we will engage in, and 2) the talents and experience of those selected. The latter will, to a large degree, be my responsibility. As I become better acquainted with what types of experiments we will be participating in, roles to support the experiments will be defined. Other roles will be of the types that one would normally develop on a long trip. The following is an example of some things I have in mind. (10 July Memo to Selection Committee).

#### DISCIPLINE

Discipline is how I conduct myself as individual without creating an unwanted situation either for myself or for others that I am in contact with. It is also how I react to the many varying situations that arise on a long voyage which determines whether I remain passive or become active. As an example, it is part of my routine to make a routine check of the vessel during the watch. If all seems to be in order I remain passive or take no action. If something is amiss I become active to correct what I feel needs attention. (Other examples of discipline would include

following thru on whatever committments you set for yourself, watch standing responsibilities, overall conduct at sea and inport, and so on. One thing I feel strong about is the asking of questions at sea if in doubt about anything. DON'T HESITATE NO MATTER HOW SIMPLE OR DUMB YOU THINK IT IS.)

#### FOOD

Food and water naturally are important items on any long voyage and proper selection of items is essential to all of us. I am more concerned about carrying foods that are easy to cook or prepare at sea than I am with the nutrition value. This does not mean that balanced meals will not be available.

The weight of the food and water carried aboard are to be considered. The distribution of same throughout the canoe is also important. The responsibility for storage of food and water will be tasked at a later time to some of you.

I feel that snack items should be available to all and something warm should be taken on those cold nights out at sea. One should be able to make a cup of coffee, cocoa or tea. Or even a cup of soup.

(Roles, 10 July 1979 - more on food)

#### Living Conditions

There not much to say about living conditions except that we all share the vessel. There are very few comforts on the canoe and this does not prevent us from keeping things orderly, neat and clean. Shade on hot days and a warm spot in the hale on cold or wet nights become areas of high use. Consideration of others is important. (Bathroom facilities, sharing hale, space, etc.)

#### Personal Gear

Only take what is needed. (Varies with each person)

#### Incidents At Sea

N/C. DON'T FALL OVERBOARD, ESPECIALLY AT NITE.

#### Keeping Of Personal Logs

Weather, speed, any interesting incidents that occurred, etc.

By Gordon Piianaia

49

LONG DISTANCE VOYAGING : Organization and discipline, food, living conditions, personal gear, incidents at sea, keeping of personal logs.

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A smaller organization, and one pertinent to all of us here this evening, are the two crews that will be selected to make the 1980 trips. The manner in which these two crews are organized will enlarge depend upon 1) the type of experiments and research we will engage in, and 2) the talents and experience of those selected. The latter will, to a large degree, be my responsibility. As I become better acquainted with what types of experiments we will be participating in, roles to support the experiments will be defined. Other roles will be of the types that one would normally develop on a long trip. The following is an example of some things I have in mind. (10 July Memo to Selection Committee).

#### DISCIPLINE

Discipline is how I conduct myself as individual without creating an unwanted situation either for myself or for others that I am in contact with. It is also how I react to the many varying situations that arise on a long voyage which determines whether I remain passive or become active. As an example, it is part of my routine to make a routine check of the vessel during the watch. If all seems to be in order I remain passive or take no action. If something is amiss I become active to correct what I feel needs attention. (Other examples of discipline would include



following thru on whatever commitments you set for yourself, watch standing responsibilities, overall conduct at sea and inport, and so on. One thing I feel strong about is the asking of questions at sea if in doubt about anything. DON'T HESITATE NO MATTER HOW SIMPLE OR DUMB YOU THINK IT IS.)

#### FOOD

Food and water naturally are important items on any long voyage and proper selection of items is essential to all of us. I am more concerned about carrying foods that are easy to cook or prepare at sea than I am with the nutrition value. This does not mean that balanced meals will not be available.

The weight of the food and water carried aboard are to be considered. The distribution of same throughout the canoe is also important. The responsibility for storage of food and water will be tasked at a later time to some of you.

I feel that snack items should be available to all and something warm should be taken on those cold nights out at sea. One should be able to make a cup of coffee, cocoa or tea. Or even a cup of soup.

(Roles, 10 July 1979 - more on food)

#### Living Conditions

There not much to say about living conditions except that we all share the vessel. There are very few comforts on the canoe and this does not prevent us from keeping things orderly, neat and clean. Shade on hot days and a warm spot in the hale on cold or wet nights become areas of high use. Consideration of others is important. (Bathroom facilities, sharing hale, space, etc.)

#### Personal Gear

Only take what is needed. (Varies with each person)

#### Incidents At Sea

N/C. DON'T FALL OVERBOARD, ESPECIALLY AT NITE.

#### Keeping Of Personal Logs

Weather, speed, any interesting incidents that occurred, etc.

By Gordon Piianaia

51.

MINUTES  
STEERING COMMITTEE MEETING

Kamehameha School  
Keoua 102  
Wednesday, June 20, 1979  
6:30 P.M.

1980 - Crew Training  
New candidate they put  
in recommendation by  
New Solid.com

PRESENT: Jan Dill, Will Kyselka, Gordon Piianaia,  
Leon Sterling, Dixon Stroup, Myron Thompson  
Roy Yee (M. Among)

Acting Chairman Jan Dill opened the meeting by reviewing the crew candidate training program. Several topics were discussed with emphasis placed on the following:

- a) Review and evaluation of the watermanship and medical history forms should be completed as soon as possible. The evaluations will be done by M. Tongg (watermanship) and Charman Akina (medical history).
- b) Field excercises on the Hokule'a will <sup>not</sup> be scheduled until final and written Coast Guard approval is received and all needed repair work is completed on Hokule'a. Leon Sterling, Acting Chairman, Canoe Committee will prepare a list of items that are in need of repair.
- c) Thirty-eight candidates have expressed their willingness to participate in the training program. Twenty-three candidates have not responded and seven candidates have declined. M. Among and N. Thompson will contact those candidates who have not responded.

The rationale for the following recommendations by the Crew Selection Committee are based and supported by the minutes of the Crew Selection Committee - June 20, 1979:

- a) Gordon Piianaia be the only Captain from the time the Board approves of his selection until he returns from Tahiti. The canoe is his main responsibility and under his command.
- b) Option of a back-up captain is seriously being considered.
- c) Selection of the first-mate deferred until a later date.
- d) Selection of an additional navigator deferred until a later date.

Jan Dill will present these recommendations in a memorandum to the Board of Directors.

Page Two  
STEERING COMMITTEE MINUTES  
June 20, 1979

Regarding Nainoa Thompson's inquiry with Mau the following report was given:

- a) If Mau can work out his commitments he would like to come to Hawaii to train Nainoa Thompson and Shorty Bertleman.

Mau preselected N. Thompson and S. Bertleman because of his past experiences with them.

- b) The Crew Selection Committee needs to clarify with Mau that when he comes to Hawaii, he is strictly a consultant/teacher. This will prevent confusion in authority. Mau will report to Gordon Piianaia and he in turn to Jan Dill.

The fund raising activities for the 1980 voyage are on schedule with letters of request for contributions to be sent within the next ten days. M. Thompson indicated that \$47,000 is committed of the \$80,000 plus goal. He is being assisted by Neil Hannahs, Gil Ishikawa, and Frank Hata. Further information on budget costs are needed for the following:

- a) Food budget requirements for the training session
- b) Budget requirements in Tahiti for crew and Hokule'a

The Steering Committee has decided to close the training program from any additional participants.

The next meeting is planned for Wednesday, June 27, 1979, 7:00 P.M. at the Planetarium. The meeting will deal with the memorandum to the Board of Directors and update on the escort vessel.

mar

1980 - O.C. Training

As Captain I'll control  
Course Committee  
- Report to Steering Comm  
- Report to Board on  
delegate to Course Comm Chairman.

## A G E N D A

STEERING COMMITTEE  
Wednesday, July 18, 1979

- I. REVIEW - TRAINING PROGRAM
- II. BUDGET
- III. FUND RAISING
- IV. CREW SELECTION PROCESS

1. By August have some framework for field training.  
- about sails  
By Oct - longer sails.

\* Check on budget figure for course: Hawaii to Tahiti & back.  
- Does it have to be revised. \* Get back to Pinky.

# A T T E N D A N C E

|                      | CREW CANDIDATE TRAINING |            |            |            |            |            |            |            |            |  |
|----------------------|-------------------------|------------|------------|------------|------------|------------|------------|------------|------------|--|
|                      | June<br>11              | June<br>13 | June<br>18 | June<br>20 | June<br>23 | June<br>25 | June<br>27 | July<br>01 | July<br>09 |  |
| ** ABRAMS, SCOTT     |                         | *          |            |            |            |            |            |            |            |  |
| * AH HEE, SNAKE      |                         |            |            |            |            |            |            |            |            |  |
| * AIU, PAT           |                         | *          | *          |            |            |            |            |            |            |  |
| AKIN, MICHAEL        | *                       | *          | *          | *          |            | *          | *          |            | *          |  |
| AKINA, CHARMAN       | *                       | *          | *          | *          |            | *          | *          | *          |            |  |
| ** AMONG, MARLENE    |                         |            |            |            |            |            |            |            |            |  |
| ** AU, WEDEMEYER     |                         | *          | *          | *          | *          | *          | *          |            | *          |  |
| BARBER, BERT         |                         |            |            |            |            |            |            |            |            |  |
| ** BAYBAYAN, CHAD    | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |
| BENSON, JOHN         | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |
| ** BERTLEMAN, SHORTY |                         |            |            |            |            |            |            |            |            |  |
| BLANKENFELD, BRUCE   | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |
| CHUNG, LOUIE         | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |
| CROUCH, TAI          | *                       |            | *          | *          |            |            |            |            |            |  |
| DAVIS, TEDDY BEAR    |                         | *          | *          | *          |            |            |            |            |            |  |
| DESOTO, DANNY        |                         | *          | *          | *          |            |            |            |            |            |  |
| FROISETH, TEENE      | *                       | *          | *          | *          |            | *          | *          |            |            |  |
| ** GONZALES, AL      | *                       | *          | *          | *          | *          | *          | *          |            | *          |  |
| GUERRERO, ANTHONY    |                         | *          | *          | *          | *          | *          | *          | *          | *          |  |
| HO, HARRY            |                         | *          | *          | *          | *          | *          | *          | *          | *          |  |
| JONES, KEOLA         |                         | *          | *          | *          | *          | *          | *          |            |            |  |
| ** KAI, SAM          |                         | *          | *          | *          |            |            |            |            |            |  |
| KEAULANA, BUFFALO    |                         | *          | *          | *          |            |            | *          | *          | *          |  |
| KIHOI, PUNA          | *                       |            | *          | *          |            |            | *          | *          | *          |  |
| ** KRUSE, JOHN       | *                       |            |            | *          |            | *          | *          | *          | *          |  |
| KYSELKA, WILL        |                         | *          | *          | *          |            | *          | *          | *          | *          |  |
| LYMAN, DAVID         | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |
| MERSEREAU, MARION    | *                       | *          | *          | *          |            | *          | *          | *          | *          |  |
| MCGUIRE, BUDDY       | *                       | *          | *          | *          |            | *          | *          | *          | *          |  |
| ** MURPHY, JOHN      | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |
| PARK, STANLEY        | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |
| PIIANAIA, GORDON     | *                       | *          | *          | *          |            | *          | *          | *          | *          |  |
| ** PIIANAIA, NORMAN  | *                       | *          | *          | *          |            | *          | *          | *          | *          |  |
| ** REINER, KEANI     | *                       | *          | *          | *          |            | *          | *          | *          | *          |  |
| SHIPMAN, CHUCK       | *                       | *          | *          | *          |            | *          | *          | *          | *          |  |
| SOMSEN, STEVE        | *                       | *          | *          | *          |            | *          | *          | *          | *          |  |
| STERLING, JO-ANNE    | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |
| STERLING, LEON       | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |
| THOMPSON, NAINOA     | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |
| TONGG, MICHAEL       | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |
| WONG, NATHAN         | *                       | *          | *          | *          | *          | *          | *          | *          | *          |  |

29

\*\* OUTER ISLANDS

\*\* OUTER ISLANDS

29

SL

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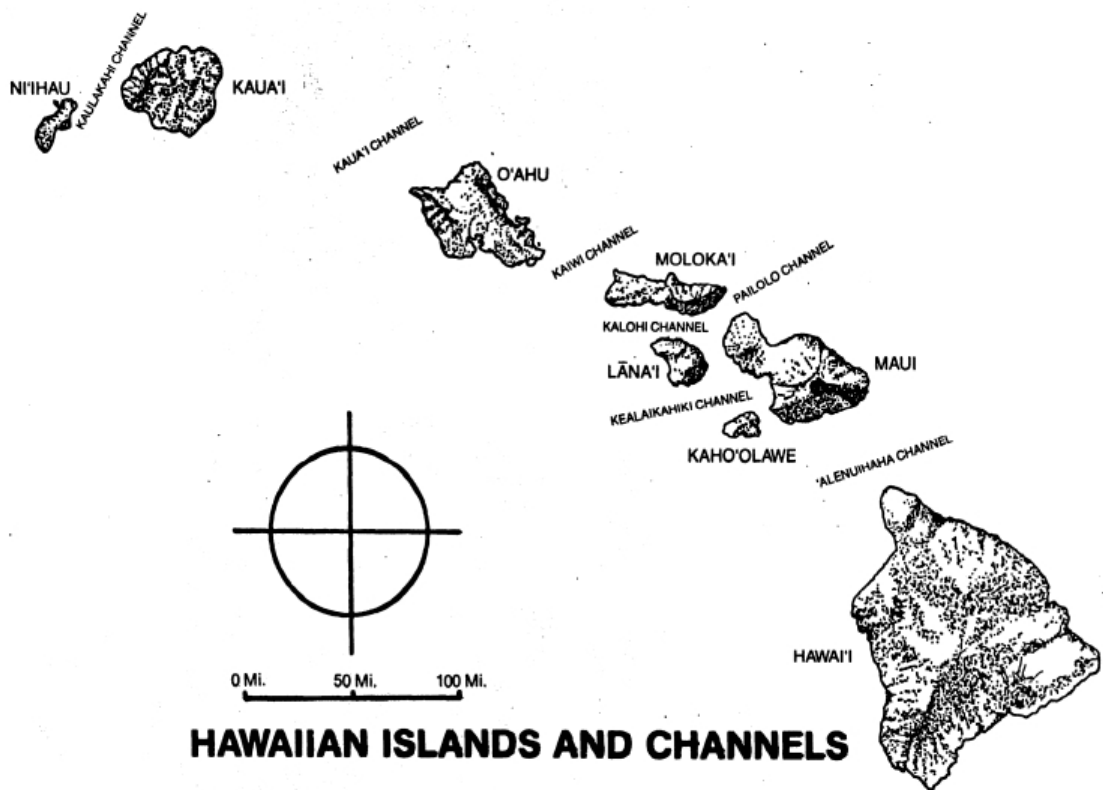
Uleia

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Uleia







## CREATIVE LANGUAGE ACTIVITIES ABOUT HŌKŪLE'A

By Cecilia Kapua Lindo

### I. YOU NAME IT!

When anything is invented or created, a name is usually given to it. *Hōkūle'a* was the name given to the double-hulled canoe that the Polynesian Voyaging Society created. *Hōkūle'a* means "Star of Gladness," and you hear this famous name quite often. See if you can invent a sea craft or machine in your mind. Give it a name and explain your new invention. Tell why you gave it the name you chose.

### II. HOW CONVINCING ARE YOU?

The following are some imaginative questions. Choose one to write answers for. Tell your story to the class. Pretend that you are very serious and that your answer is true. Try to convince the class about your true story.

1. Why did *Hokūlīlī'i*, the dog, quarrel with the chickens aboard *Hōkūle'a*?
2. What made Maxwell, the pig, cry?
3. What did Arcturus, the star, see?
4. What song did the porpoises sing?
5. What if you were *Hōkūle'a*, the famous canoe?

### III. SPECIAL NEWS: READ ALL ABOUT IT!

The local newspapers wrote daily accounts about the journey of *Hōkūle'a* in 1976. Can you remember some of the stories that were written? If you don't remember them, get information from the State Library, or the Polynesian Voyaging Society. Pick a title and write a story based on the articles you read.

### IV. LET YOUR TALENT BE YOUR GUIDE.

Pretend that you are as gifted and sensitive as the legendary Mau Piailug and Nainoa Thompson who were able to navigate the *Hōkūle'a* without compass or instruments. Their guides were the stars, currents, winds, birds, their self-confidence and spiritual awareness. Write a paragraph about your special gift using the following questions to guide you. Don't limit yourself to these questions.

1. What are your special talents?
2. Who gave you these gifts?
3. What will you do with these unique abilities?

### V. CREATE YOUR OWN LEGEND.

Long ago, people made up myths or legends to explain something in the world around them. Pick one of the following statements and write a myth about it. Use your imagination!

Statements:

A barkless dog, a hard-shelled turtle, a fish with fins, a shark with 300 teeth, a crowing rooster, a pig's oink.

### VI. WHAT WILL YOU DO WITH IT?

Read the phrases below and try to imagine what it might be like to own each item listed. Which one would you especially like to have? Write sentences telling what you could do with three items. Where would you keep them?

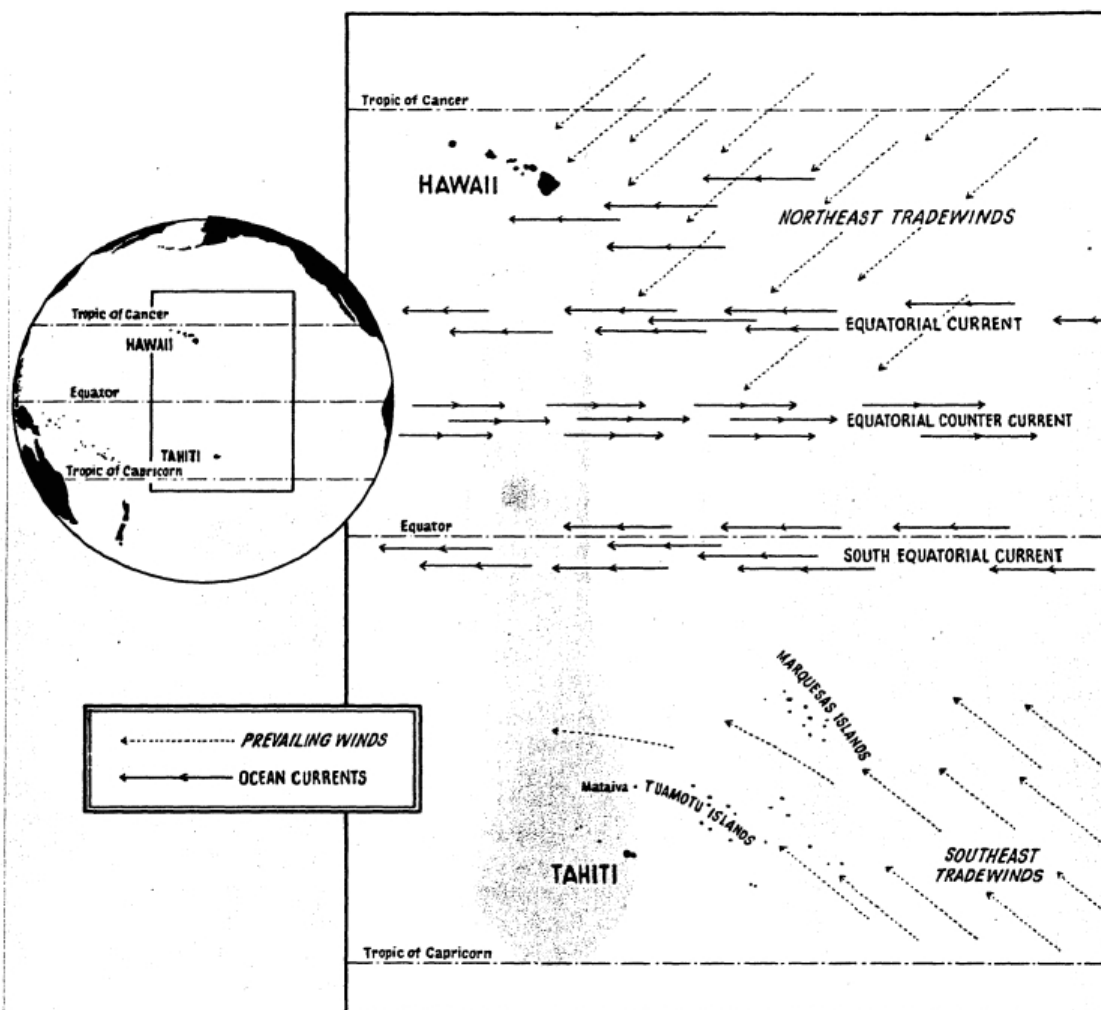
Items:

A booby bird, a single-hulled canoe, a large *lauhala* sail, a *lei hulu* (weather indicator), Maxwell, the pig, 10 dried fish, one *koa* log, coconut fiber, a compass, a Golden Plover.

### VII. NO PLANES, NO CARS!

Can you imagine a world with only canoes as a means of transportation? How would you visit friends? How would you travel to other places in the world? Do you think navigating by stars, currents, winds, birds, etc., would be a difficult task? Write a story about what it might be like to live in a world with only canoes as a means of transportation.

# General Systems of Winds and Currents between Hawai'i and Tahiti By Ray Lanterman

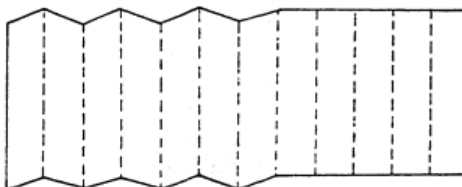


## PITCH AND ROLL

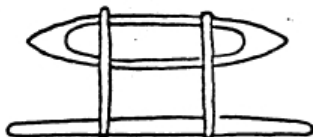
By Captain Dave Lyman

Capt. Dave Lyman of the Polynesian Voyaging Society suggested this demonstration to illustrate pitch and roll and a combination of both.

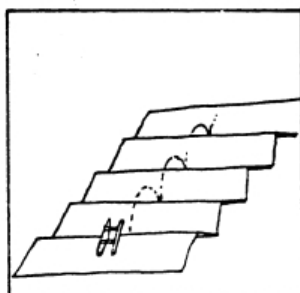
You will need a large piece of poster paper, 11 x 17 inches. Fold the paper like a fan, making the folds 2 inches wide. The folds represent swells on the ocean.



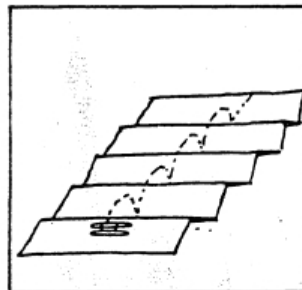
Cut a canoe out of cardboard using this model.



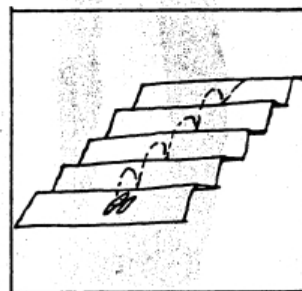
Place the canoe so that it is at right angles to the folds or swells. Move the canoe along the swells and you will see how a canoe heading straight into the swells *itches*.



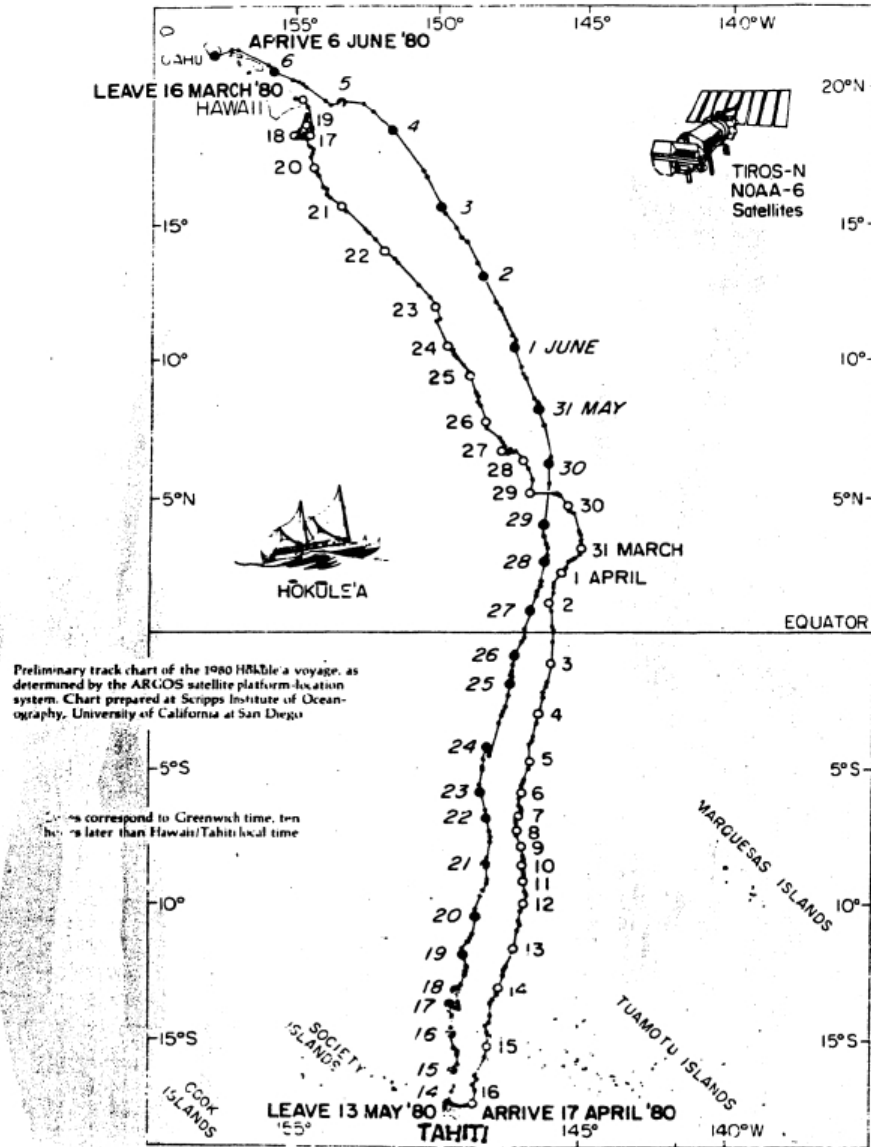
Now turn your canoe so it is abeam, or parallel, to the swells. Move the canoe diagonally across the paper, always keeping the canoe parallel to the swells. The canoe will *roll* in a sideways swaying motion.



Alter the course of your cardboard canoe as it moves along the swells. The canoe will pitch and roll at the same time. Do you see how the navigator detects changes in course direction?



## JOURNEY OF HOKULE'A—1980



Preliminary track chart of the 1980 HOKULE'A voyage, as determined by the ARGOS satellite platform location system. Chart prepared at Scripps Institute of Oceanography, University of California at San Diego.

Numbers correspond to Greenwich time, ten hours later than Hawaii/Tahiti local time.

