

B3-150

KEALAIKAHIKI TRIP

April 1977

KEALA IKAHIKI

We cannot escape the impact of Hōkūle'a upon us now that the re-enactment of an ancient voyage has been completed. It does not definitively prove that such voyages were made, but it does show the possibilities of them being accomplished in the past. If we can realize the role of the Polynesian in the Pacific, then we can surely see that such voyages were within his capabilities. If we could somehow measure his abilities, then perhaps we would better appreciate the Polynesian and his canoe in his Pacific realm. As long as we think in 'Western' ways we will not fully appreciate the Polynesian in the Pacific and there will always be those who 'doubt'.

The voyage of the Hōkūle'a from Hawai'i to Tahiti entailed sailing hard on the wind for the first few days of the trip. If this point of sail was to test Hōkūle'a's windward ability, then it has shown that this capability does exist. However, was not this type of testing carried on during sea trials and inter-island trips? Why was this knowledge not put to use on the Hawai'i to Tahiti trip? If anything, the choice of the departure route has pointed out that the type of sailing encountered by Hōkūle'a and crew those first few days will always be wet, uncomfortable and slow. This is certainly nothing new for those who go to sea.

Was the 'easting' necessary to reach Tahiti that crucial to the overall results of the trip that local traditions were tossed aside? The northern route taken by Hōkūle'a gives hint of suspect as to whether or not 'easting' could have been gained by taking some other route.

There is no doubt that a departure down Kealaikahiki would have been more in line with tradition. Yes, traditions that have been passed down orally are sketchy, but they remain sketchy unless we can test them. We had the opportunity to test the Kealaikahiki tradition but did not take advantage of it. Sailing down Kealaikahiki would have added something Hawaiian to the trip. It would have also perhaps given us some insight as to why the channel and point on Kaho'olawe are named Kealaikahiki.

ROUTE

The route will involve sailing Hōkūle'a between Lāna'i and the west coast of Kaho'olawe. Departure will be Kealaikahiki Pt. on the west end of Kaho'olawe. Hōkūle'a will be sailed on a southerly course to avoid the wind shadow of the Big Island. Weather and wind permitting, it is hoped that Hōkūle'a can sail closer to the Kona side of the Big Island. A 'kona' wind would be beneficial in getting around the southern end of the Big Island, but we will just have to see what we will encounter out at sea.

Once clear of the wind shadow, Hōkūle'a will be sailed on a SE'ly course to gain the 'easting' necessary to reach the Society Islands. It is not necessary to reach any defined point on this course as we can show that it is possible to gain the 'easting' needed by using instrumental aids and plotting out a dead reckoning course.

The return portion of the trip is open to suggestions. One proposed suggestion is that Hōkūle'a be sailed to Hana, Maui for a 2-week period under the supervision of Sam Kalalau. Then, following, the 2-week period at Hana, Maui, Hōkūle'a can be sailed to the Big Island under the supervision of Shorty Bertleman. Otherwise, the plan is to return Hōkūle'a back to O'ahu.

CALENDAR/TIME TABLE

The tentative schedule is to depart O'ahu the evening of the 1st of April and sail (or power) to Lāna'i. The 2nd of April will be spent on Lāna'i. The canoe can be opened to the public for visitations. That evening will be spent studying the stars and departure will be sometime the next day.

The 1st of April has been scheduled for this trip as this was the proposed departure date for the Hawai'i to Tahiti trip in 1976. This is also during the Easter break and some crew people will be on vacation from school during this period.

HISTORICAL VALUE:

Tradition tells us that La'amaikahiki lived on the west coast of Kaho'olawe until he sailed for Tahiti. It is said that this is the reason why the channel to the west of Kaho'olawe (southeast of Lāna'i) is called "Kealaikahiki (the path to kahiki)."

We do not know of any tradition telling, upon taking departure from the Hawaiian Islands, of a northerly route that goes north of Maui and Hawai'i and then south to Tahiti. The lack of oral tradition does not rule out such a possibility in the past, but logically such a route is hard to consider as being within the limits of what we today refer to as 'good seamanship'.

By sailing Hōkūle'a down Kealaikahiki Channel the following can possibly be accomplished:

1. That this proposed short trip is a more logical departure route for sailing from Hawai'i to Tahiti. Though many departure points and routes may have been used, this proposed track is closer to traditional information we have in regards to long voyages to Tahiti.
2. By sailing the proposed track and picking up a point on the track of Hōkūle'a from this past summer, that this is a shorter or possibly quicker route to sail to Tahiti from Hawai'i.
3. The 'easting' necessary to reach Tahiti can still be gained but will be more gradual.

CANOE PERFORMANCE:

Hōkūle'a has been sailed thousands of miles under varying conditions. During these short and long trips, canoe performance has always been noted and observed. Further observation of canoe performance can be accomplished on this proposed trip.

By sailing Hōkūle'a down Kealaikahiki Channel the following can be accomplished:

1. That not only can further work be done in regards to canoe and sailing performance, but that Hōkūle'a is a well designed sailing canoe and capable of being sailed on the proposed track to gain the necessary 'easting' needed to complete a long voyage from Hawai'i to Tahiti.
2. That by sailing on the proposed track Hōkūle'a is a smoother sailing canoe and provides a more stable and comfortable platform for a crew departing on a long voyage. On her trip to Tahiti, Hōkūle'a sailed close to the wind, which made for a wet and uncomfortable departure, during the first week out at sea. As we gain more information on canoe performance, future trips to Tahiti can possibly avoid a northerly route.

NAVIGATION:

The navigational feat successfully accomplished by Hōkūle'a's navigators on the Tahiti trip has aroused a tremendous amount of interest in non-instrumental navigation.

On this proposed trip, Hōkūle'a will be navigated without the use of any modern navigational instruments. Any modern instruments carried aboard (sextant, chronometer, etc.) will be used solely to denote when and where Hōkūle'a has crossed its old track. Otherwise, the presence of modern instruments or equipment carried aboard will be used for documenting the trip and for the collecting of data.

At no time during the trip will the non-instrumental navigation be interfered with or hindered by the aid or use of modern navigational instruments. All recommended courses or changes will be derived by the use of non-instrumental navigation. Actual daily positions will be recorded by the use of modern navigational instruments.

By sailing Hōkūle'a down Kealaikahiki Channel the following can possibly be accomplished:

1. That on a short trip, Hōkūle'a can be safely sailed without using any modern navigational instruments.
2. That there are seafaring individuals of Hawaiian ancestry who have the capability and local knowledge to successfully navigate Hōkūle'a as proposed.
3. That knowledgeable and experienced Hawaiians should be sought out for future endeavors. (The successful Tahiti trip was navigated by a Micronesian, Tahitian, and New Zealander.)
4. That preparation, training and existing knowledge, material or immaterial, in navigating Hōkūle'a (or any other vessel) without using modern instruments is vital to the success of any trip.
5. That interest in non-instrumental navigation has been aroused and the Polynesian Voyaging Society should sponsor sessions or workshops relative to this practice in the future.

CREW:

On the trip to Tahiti and back home to Hawai'i a criteria of having surfers or canoe paddlers was established. On this trip the same kind of consideration can be given when selecting the crew. However, the bulk of the crew will consist of experienced seagoing individuals over others. Hopefully, enough ocean-going Hawaiians will want to make this trip. Another consideration will be Polynesian Voyaging Society members who did not make the long Tahiti trip. Final selection naturally falls upon the Board of Directors of the Polynesian Voyaging Society.

Like any other voyage, long or short, compatability will be desired. In addition, roles will be defined so that all crew members will have added duties besides standing their watches.

By sailing Hōkūle'a down Kealaikahiki Channel the following can possibly be accomplished:

1. That there are seafaring Hawaiians who are experienced to make long trips out at sea.
2. That seafaring types are more attuned to and adjust better out at sea, although this is not always so. There are individuals who make the adjustment easily.
3. That compatability, maturity, experience, responsibility, etc. are important in the success of any voyage.
4. That the Hōkūle'a should be continued to be used as a teaching platform for individuals whenever possible.

FOOD REQUIREMENTS:

At the present time, the bulk of food carried aboard for the trip will be paid for from the \$500.00 set aside for this project by the Education Committee.

COMMUNICATION:

There will be no ship-to-shore communication.

EMERGENCY GEAR:

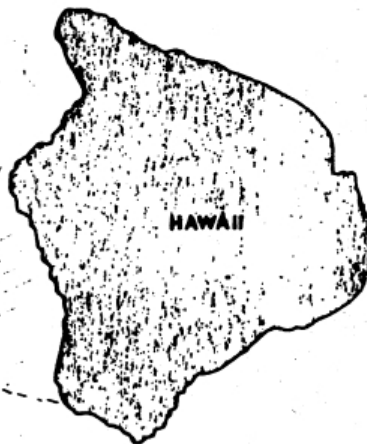
As required.

KEALA IKAHIKI



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COURSE 180°



COURSE 120°

Statute Miles

50

100

Nautical Miles

50

100

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*Not necessary to pick-up
the original track*

*May 12th with heading @ 0300, 6 April would have met Hōkūle'a's
original track to Tahiti*

*Vessel was lifting into wind as wind backed from E'ly to
N'ly, very likely that we would have intercepted sooner*

*Possible that the best wind to leave on is 1st N'ly after
a long kona calm*

** Very comfortable*

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* With Nainoa's direction from celestial bodies & input from other experienced seamen aboard as per swells & an efficient "navigating team" can be assembled from people here in Hawaii. Nainoa's feelings of position close to actual positions as per Kimo

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EMERGENCY GEAR:

As required.

May 3, 1978

To: Polynesian Voyaging Society
Officers and Board of Directors
From: Mrs. Jo-Anne K. Sterling, P.V.S. Vice-President
Subject: Hawaii to Tahiti Voyage

As an aid to the decision making process to Hokule'a's sail to Tahiti, I vote in favor of the trip.

We are all cognizant of the efforts and hardships that have and continue to be displayed for Hokule'a. All those that have contributed, have been taxed with responsibilities and emotional strains on a physical and spiritual level. It is during times such as these that direction is most needed.

That the Hokule'a sail to Tahiti is not necessarily the ultimate in the canoe's existence, but is has always been Hokule'a's greatest focal point. Hokule'a is and will always be a voyaging canoe.

Realizing that all the components that make up Hokule'a, ie: Construction and design, sailing ability, the administration that guides her, its totality, is still in it's infancy, let us not regress but refine and season ourselves with a greater knowledge and understanding of what we are trying to accomplish. In light of this refinement it is requested that the Steering Committee be retained, and every member of the committee be given the opportunity to increase his contribution to the betterment of the canoe.

The reflection of all our efforts can readily be seen in the modifications to the canoe, the sails that are being made, and the slow but progressiveness of the repairs to the canoe its self.

We have all been asked to contribute our best and in doing so, we too like Hokule'a are in need of repairs. It is with this promise in mind that a revitalized training program inclusive of seamanship, increased interaction and communication be afforded to Hokule'a's present crewmembers and to all interested parties, so that a greater level of harmony between us all can be realized.

Upon completion of the current seaworthiness of Hokule'a, it is also requested that the reinstitution of the canoe's educational workshop be initiated during the Hawaii-Tahiti interum.

The benifits of the workshop to all of us, affords us the opportunity to better understand ourselves, our capabilities and limitations, but most of all we progressing through education for the enlightenment of Hawaii's people.

JS

POLYNESIAN VOYAGING SOCIETY

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

April 20, 1979

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VICE PRESIDENT

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TREASURER

ANTHONY GUERRERO, JR.

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GORDON PIANAIA

TO: BOARD OF DIRECTORS

FROM: MAR

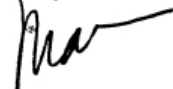
SUBJ: POLYNESIAN VOYAGING SOCIETY

Aloha,

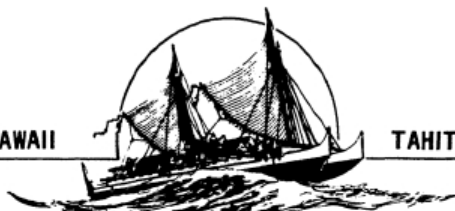
The attached is for your information on
why the importance and need of the
Polynesian Voyaging Society

Your suggestions and input to the
attached will be appreciated.

Love,



HAWAII



TAHITI

BICENTENNIAL VOYAGE OF REDISCOVERY
HOE AKU I KA WA'A

WHY THE POLYNESIAN VOYAGING SOCIETY IS NEEDED

- a) There is a lack of knowledge and expertise in the public and private educational systems to facilitate the cultural and educational aspects of Polynesian voyaging and settlement.
- b) There is only one resource center in the world, the POLYNESIAN VOYAGING SOCIETY, that can provide adequate knowledge and information in the area of Polynesian migration and settlement.
- c) There is a lack of knowledge and appreciation about the cultural roots (Polynesian mariners) of the native Hawaiians that negates positive self-concepts and stifles the productive performance of native Hawaiian children, and adults in the present societal structures.
- d) There is a need to train individuals to plan, manage and disseminate information and training workshops; to continue voyaging experiments, gather data, and develop materials based on this research; and to promote positive relationships between the various local, national and international, public and private agencies and groups.
- e) There is a need to develop reproducible editions of student and teacher materials for the elementary, intermediate, and secondary levels on Polynesian voyaging.
- f) There is a need to effect a cooperative working relationship between the Department of Education and other educational organizations as a precedent for future cooperative ventures in the development of additional programs about Hawaiian culture, namely Polynesian migration and settlement.

WHY SUPPORT THE POLYNESIAN VOYAGING SOCIETY?

In 1778, when Captain James Cook rediscovered Hawai'i, he estimated 300,000 native Hawaiians. By 1840, the Hawaiian race dwindled down to 70,000 people.

When Cook, the missionaries, immigrants and others came to the Hawaiian Islands tremendous and tragic changes took place. The islands, isolated from the outside world, were suddenly invaded by an influx of people. Diseases were introduced, the kingdom was overthrown by foreigners, and the culture was uprooted. Such rapid transition had devastating effects which proved almost fatal to the entire Hawaiian race.

In the 1840s, the popular saying of the day was "Na kanaka o ku'u wale aku no i ka uhone." ("The people freely gave up their souls and died.") Physical and psychological death had been the choice of many Hawaiians who could not cope with the despair that overwhelmed them.

The calamitous results of the past still plague many Hawaiians today. They have the highest incidence of poverty, high school dropouts, and unemployment of any racial group in Hawai'i. Preventive measures have to be implemented and applied. When people have inadequate education, a limited knowledge of their cultural roots, poor self esteem, and where families are disoriented, societal problems escalate. Education therefore is the key to building up self-worth, self-sufficiency, and self-direction.

Along with the social ills, the 1970s show a resurgence of interest and hope for the Hawaiian culture among Hawaiians. There is a vitality and commitment among Hawaiians to learn about their culture, to uplift themselves and their heritage through education. A deliberate search is being made for Hawaiian identity. Regrettably, Hawaiian culture has been regarded irrelevant in the past. However, on November 7, 1978, voters of Hawai'i realized this need and voted on promoting and implementing Hawaiian studies into the school system and community. This was an amendment proposed by members of the Constitutional Convention of 1978.

A renaissance in Hawaiian culture was evidenced by the founding of the POLYNESIAN VOYAGING SOCIETY in 1973. Its purpose has been to do research work in Polynesian voyaging canoes, Polynesian navigational systems, and all the other aspects of Polynesian culture that made migration and settlement of the Hawaiian Islands possible by the first settlers. Multi-racial members of the Society built the Hokule'a, a double hulled canoe, in 1974, trained a crew in 1975, and sailed from Hawai'i to Tahiti and back to Hawai'i in 1976. The three year plan became a life-size reality which received strong community support and culminated as a special Bi-centennial project from Hawai'i.

The 60 foot, twin hulled canoe called Hokule'a was designed to answer the questions of whether the ancient Polynesians regularly navigated the 3,000 mile course between Hawai'i and Tahiti. Builders of the canoe found that centuries before Columbus, Polynesians aboard voyaging canoes explored a huge triangle of the earth's surface, with Hawai'i, Easter Island and New Zealand as its outer limits. Guided by the stars, currents, birds, winds, and ocean swells, they accomplished incredible feats of navigation and seamanship as they sailed across thousands of miles of open ocean.

Though Hokule'a was built mainly of modern materials, such as plywood and fiberglass, its lines were authentic and reconstructed from sketches by explorer Captain James Cook and other explorers.

In 1976, seventeen men who made up the crew of Hokule'a, sailed it to Tahiti. One of the key men was the navigator, Mau Piailug, from Satawal in Micronesia. Mau, a strong 44 year old, became a full fledged navigator at the age of 18, and sailed throughout the central Carolines without relying on any navigational instruments. Mau was assisted by Rodo Williams, a Tahitian and former schooner captain, and David Lewis, a Caucasian who had studied with traditional navigators in Tonga and Micronesia. None of the three used any instruments during the voyage nor did they receive any hint of their position from the escort vessel that accompanied Hokule'a on this 3,000 mile journey. Half of the crew who went on the voyage were Hawaiians. Hokule'a reached Tahiti after 34 days and was received by a jubilant crowd of 15,000 Tahitians, the largest crowd in the memory of that island. Hokule'a helped to answer the question of whether the ancient Polynesians could have navigated the 3,000 miles covered between Hawai'i and Tahiti without instruments, with the intention of settling on these uninhabited islands.

The impact Hokule'a made on cultural awareness and appreciation continues to inspire the development of many projects about Polynesian voyaging. Many educational programs and materials have been developed by the Education Committee of the POLYNESIAN VOYAGING SOCIETY since the birth of Hokule'a. Four children's books and a teacher's guide were written about Polynesian voyaging. The subject of the CHILDREN'S BOOK PROJECT was conceived by Dr. Kenneth Emory and coordinated by Nancy Mower. Dr. Emory suggested that the series of four books be based on the oral tradition of High Chief Mo'ikeha and his family who migrated from Tahiti to Hawai'i. Chants, geneology and legend tell about this seafaring family that made about 6 voyages between Hawai'i and Tahiti.

These publications are currently used in over 160 schools in the State of Hawai'i and throughout the United States and abroad.

Over 3,000 of the originally printed 5,000 books have been sold. One thousand Resource Curriculum Guides were originally printed and 1,000 more had to be reprinted because of requests for them. The State Library RUSH list approved all books and gave the Resource Curriculum Guide a "highly recommended" status.

During the school year 1977-1978, the SPEAKERS' BUREAU of the Polynesian Voyaging Society was able to reach a large number of students and teachers in Hawai'i's schools. Members of the crew spent countless hours during the year making presentations. The speakers utilized films, slides, models and other audio and visual materials. In addition, an overview of the Polynesian voyaging and Hokule'a was presented to many community groups and organizations.

The scheduling of schools and community groups was an ongoing process which resulted in an avalanche of requests for presentations. The BUREAU was unable to supply the demands of speakers. However, the number of requests indicated that Hokule'a had and will always have a lasting effect on the people of Hawai'i.

Target Audience Figures - 1977-78

Total Elementary Audience	6,369
Total High School (Intern) Audience	6,094
Total College/University Audience	374
Total Community/Organization Audience	3,908
 Total School (K-12) Audience	 12,463
Total Adult Audience	4,746
Total Audience (all ages)	17,209

Hokule'a was used as a teaching aid or "floating classroom" during the year 1977-78. CANOE VISITATION with commentary by crew members took place on O'ahu, Moloka'i, Lana'i, Hawai'i, and Kaua'i. The canoe visited all of the neighboring islands by the end of summer, 1979.

Community response was outstanding and all indications showed that Hokule'a should continue to be used as a "floating classroom". During interisland trips, new crewmen were introduced to the Hokule'a. The practical experience gained was invaluable and should be continued.

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The dramatic creation and epic voyage of the Hokule'a is a history of great magnitude that continues to flourish because it has provided us with a rich storehouse of first hand information about Polynesian voyaging.

Plans for the Hokule'a and the POLYNESIAN VOYAGING SOCIETY are inspiring and full of promise for retaining the best of our Polynesian heritage. In a sense, the educational voyage of Hokule'a is just beginning, but it can only have lasting and dynamic effects with continued support from the community.

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10. Disseminate information through educational materials, workshops, seminars, exhibits and presentations
11. Provide public with materials and speaking engagements to make them aware of the natural relations between ancient Hawaiian marine skills including proper management of the ocean resources and its applicability to modern day marine practices through audio-visual aids developed by the Education Committee
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17. Establish and maintain positive linkages with public and private groups
18. Find out what kinds of grants are available and identify significant information relative to grant writing (abstract, need, objectives, methods, etc.)
19. Generate funds for the operation of the Polynesian Voyaging Society

POLYNESIAN VOYAGING SOCIETY

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

April 20, 1979

*annotated
copy*

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VICE PRESIDENT

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TREASURER

ANTHONY GUERRERO, JR.

SECRETARY

RENEE MILLER

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ED KEALANAHELE,
REVEREND

JOHN KRUSE

FRANCIS KAINOA LEE

GORDON PIANAIA

TO: BOARD OF DIRECTORS

FROM: MAR

SUBJ: POLYNESIAN VOYAGING SOCIETY

Aloha,

The attached is for your information on why the importance and need of the Polynesian Voyaging Society

Your suggestions and input to the attached will be appreciated.

Love,

*Marylene,
Aloha nui
Angus*

HAWAII



TAHITI

BICENTENNIAL VOYAGE OF REDISCOVERY
HOE AKU I KA WA'A

WHY THE POLYNESIAN VOYAGING SOCIETY IS NEEDED

early
a) There ~~is~~ a lack of knowledge and expertise in the public and private educational systems to facilitate the cultural and educational aspects of Polynesian voyaging and settlement.

b) There is only one resource center in the world, the POLYNESIAN VOYAGING SOCIETY, that ~~can~~ provide adequate knowledge and information in the area of Polynesian migration and settlement.

c) There is a lack of knowledge and appreciation about the cultural roots (Polynesian mariners) of the native Hawaiians. ~~This~~ negates positive self-concepts and stifles the productive performance of native Hawaiian children, and adults in the present societal structures.

d) There is a need to train individuals to *to conduct* plan, manage and disseminate information and training workshops; to continue voyaging experiments, gather data, and develop materials based on this research; and to promote positive relationships between the various local, national and international, public and private agencies and groups.

for use by all
e) There is a need to develop reproducible *educational materials* ~~editions of student and teacher materials for the~~ elementary, intermediate, and secondary levels ~~on~~ Polynesian voyaging.

f) There is a need to *promote* ~~effect~~ a cooperative working relationship between the Department of Education and other educational organizations as a precedent for future cooperative ventures in the development of additional programs about Hawaiian culture, namely Polynesian migration and settlement.

WHY SUPPORT THE POLYNESIAN VOYAGING SOCIETY?

these were
In 1778, when Captain James Cook rediscovered Hawai'i, he estimated 300,000 native Hawaiians. [By 1840, the Hawaiian race dwindled down to 70,000 people.]

When Cook, the missionaries, immigrants and others came to the Hawaiian Islands tremendous and tragic changes took place. The islands, isolated from the outside world, were suddenly invaded by an influx of people. Diseases were introduced, the kingdom was overthrown by foreigners, and the culture was uprooted. Such rapid transition had devastating effects which proved almost fatal to the entire Hawaiian race.

In the 1840s, the popular saying of the day was "Na kanaka o ku'u wale aku no i ka uhone." ("The people freely gave up their souls and died.") Physical and psychological ~~death~~ *suffering* had been the ~~choice~~ *affected* of many Hawaiians who could not cope with the despair that overwhelmed them. *this overwhelming*

The calamitous results of the past still plague many Hawaiians today. They have the highest incidence of poverty, high-school dropouts, and unemployment of any racial group in Hawai'i. Preventive measures have to be implemented and applied. When people have inadequate education, a limited knowledge of their cultural roots, ~~poor~~ self esteem, and where families are disoriented, societal problems escalate. [Education, therefore, is the key to building up self-worth, self-sufficiency, and self-direction.]

~~Along with the social ills,~~ *more and more* the 1970s show a resurgence of interest and hope for the Hawaiian culture among Hawaiians. There is a ~~vitality~~ *new sense* and commitment among Hawaiians to learn about their culture, to uplift themselves and their heritage through education. A deliberate search is being made for Hawaiian identity. Regrettably, Hawaiian culture had been regarded irrelevant in the past. ~~However,~~ *On* November 7, 1978, voters of Hawai'i realized this need and voted on promoting and implementing Hawaiian studies into the school system and community. This was an amendment proposed by ~~members~~ *delegates to* of the Constitutional Convention of 1978.

A renaissance in Hawaiian culture was evidenced by the founding of the POLYNESIAN VOYAGING SOCIETY in 1973. Its purpose has been to do research ~~work~~ in Polynesian voyaging canoes, Polynesian navigational systems, and all the other aspects of Polynesian culture that made migration and settlement of the Hawaiian Islands possible by the first settlers. Multi-racial members of the Society built the Hokule'a, a double hulled canoe, in 1974, trained a crew in 1975, and sailed from Hawai'i to Tahiti and back to Hawai'i in 1976. The three year plan became a life-size reality which received strong community support and culminated as a special Bi-centennial project from Hawai'i.

The 60 foot, twin hulled canoe called Hokule'a was designed to answer the questions of whether the ancient Polynesians ^{could properly} regularly navigated the 3,000 mile course between Hawai'i and Tahiti. Builders of the canoe found that centuries before Columbus, Polynesians aboard voyaging canoes explored a huge triangle of the earth's surface, with Hawai'i, Easter Island and New Zealand as its outer limits. Guided by the stars, currents, birds, winds, and ocean swells, they accomplished incredible feats of navigation and seamanship as they sailed across thousands of miles of open ocean.

Though Hokule'a was built mainly of modern materials, ~~such as plywood and fiberglass,~~ ^{are} its lines ~~were~~ authentic and reconstructed from sketches by explorer Captain James Cook and other explorers ~~of early Polynesian~~ ^{from the Canoes}.

In 1976, ^Sseventeen men, who made up the crew of Hokule'a, sailed it to Tahiti. One of the key men was the navigator, Mau Piailug, from Satawal in Micronesia. Mau, a strong 44 year old, became a full fledged navigator at the age of 18, and sailed throughout the central Carolines without relying on any navigational instruments. Mau was assisted by Rodo Williams, a Tahitian and former schooner captain, and David Lewis, a Caucasian who had studied with traditional navigators in Tonga and Micronesia. None of the three used any instruments during the voyage nor did they receive any hint of their position from the escort vessel that accompanied Hokule'a on this 3,000 mile journey. Half of the crew who went on the voyage were Hawaiians. Hokule'a reached Tahiti after 34 days and was received by a jubilant crowd of 15,000 Tahitians, the largest crowd in the memory of that island. Hokule'a helped to answer the question of whether the ancient Polynesians could have navigated the 3,000 miles ~~covered~~ between Hawai'i and Tahiti without instruments, with the intention of settling on these uninhabited islands.

The impact Hokule'a made on cultural awareness and appreciation continues to inspire the development of many projects ~~about~~ ⁱⁿ Polynesian voyaging. Many educational programs and materials have been developed by the Education Committee of the POLYNESIAN VOYAGING SOCIETY, ~~since the birth of Hokule'a~~. Four children's books and a teacher's guide were written about Polynesian voyaging. The subject of the CHILDREN'S BOOK PROJECT was conceived by Dr. Kenneth Emory and coordinated by Nancy Mower. Dr. Emory suggested that the series of four books be based on the oral tradition of High Chief Mo'ikeha and his family who migrated from Tahiti to Hawai'i. Chants, genealogy and legend tell about this seafaring family that made about 6 voyages between Hawai'i and Tahiti.

These publications are currently used in over 160 schools in ~~the State of~~ Hawai'i and throughout the United States and abroad.

Sets of books
Over 3,000 ~~of the originally printed~~ 5,000 books have been ~~distributed~~ *distributed*. One thousand Resource Curriculum Guides were originally printed and 1,000 more had to be reprinted because of requests for them. The State Library RUSH list approved all books and gave the Resource Curriculum Guide a "highly recommended" status.

During the school year 1977-1978, the SPEAKERS' BUREAU of the Polynesian Voyaging Society was able to reach a large number of students and teachers in Hawai'i's schools. Members of the crew spent countless hours ~~during the year~~ making presentations. The speakers utilized films, slides, models and other audio and visual materials. In addition, an overview of ~~the~~ Polynesian voyaging and Hokule'a was presented to many community groups and organizations.

There has been
~~The scheduling of schools and community groups was an ongoing process which resulted in an avalanche of requests for presentations.~~ *from schools & organizations* The BUREAU was unable to supply the demands of speakers. However, the number of requests indicated that Hokule'a had, and will always have, a lasting effect on the people of Hawai'i.

Target Audience Figures - 1977-78

Total Elementary <i>School</i> Audience	6,369
Total High School (Intern) Audience	6,094
Total College/University Audience	374
Total Community/Organization Audience	3,908
Total School (K-12) Audience	12,463
Total Adult Audience	4,746
Total Audience (all ages)	17,209

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Copies to
 Mr. W. K. Brown, Leon Spelling
 D. Lyman, Ben Young, N. P. P. P.
 G. P. P. P.

G. Pionia

1978/MAY/sale
Responsibility Assignment
for Transit, 1978

Hydrule

EPR, B

2. Regarding the Raytheon shipment of radios, a telex was sent yesterday Thursday, February 23 to a Mr. Charlie Cane regarding the frequencies for the single side band radio. We also I believe neglected to confirm the picking of VHF frequencies on the Ray 48. Len please send another telex to Charlie Cane confirming the Ray 48A VHF frequencies per the February 17 letter ~~to~~ ^{from} George Kimball which you now have a copy of. I will not go over the frequencies picked on the single side band but Len did talk to Charlie Cane via telephone this morning he did receive the telex regarding the frequencies and he will adopt the single side band radio for a telephone handset, he does not recommend it because it is bulky but the vessel appears to want to have a telephone handset so they can maintain some security in the communications with Coast Guard and anyone else including WWVH radio transmissions so the non-instrument navigator would not have any idea what time it is. He will send extra antenna coupler control cable, extra mike for both radios and any extra that he feels we will need. He also called back Monday between 8:30 and 9:00 AM Hawaiian Standard

WYB-8064

ILLEGIBLE

Page 2

time and he now has 12 of the 25 crystals . We can accept some missing ones without too much trouble. Incidentally the radios are planned to be shipped on the 1st of March. Please note they will ~~not~~ include spares and antennas.

3. I have instructed Len to order some Shakespeare antennas and mounts for the Hokule'a so that they can take one single side band antenna as spare, one VHF antennax as spare and they ~~were~~ were sent via telex today on PO LW8951, Len please follow up on this.

4. Radio Licenses. On Wednesday, I passed on the forms for the VHF, single side band and the EPRIB license applications. They are all done on the blue form. Leon Sterling will coordinate the proper signatures and go down to the FCC in getting ~~down~~ the proper call sign assignments. I also passed on to him the restricted radio telephone operators cards for them to fill out. As it stands right now as I understand it unless I am told different by Leon Sterling Capt. Dave Lyman probably has his restricted radio operator license because he is a harbor pilot, Norman Piianaia probably has his because he is a chief mate on the Hawn Princess. Leon Sterling and his wife Joann will probably get theirs since those two will be staying in Tahiti with the vessel for a year. This is now confirmed that the vessel will stay in Tahiti for a year. ~~Any~~ Any licensing problem should be referred to Ken Yamada for completion to help them walk through. He gave me these forms anyway.

5. Regarding communications with U.S. Coast Guard Search and Rescue, I will be sending a letter to Dr. Ben Young who is the so-called Project Coordinator for this thing requesting that he file the float plan for the Hokule'a . The address is Commander (RCC) 14th Coast Guard Dist., 300 Ala Moana, Honolulu, Hi
Attn: Lt. ~~John~~ John Waldron or Lt. Bruce Austin. I have talked to both of these

gentlemen and they have agreed to keep a log on the Hokule'a and Ben Young is to coordinate with them to get ~~these~~ ^{news} releases and anything like that. I have already talked to these people. Len has talked to some additional people. Mr. Chumal at 546-5587 ~~has~~ ^{has} coordinated the picking of the HF frequencies with Len.

6. Any arrangement with Hawn Telephone for High Seas radiotelephone service will be done by Ben Young. On this date I am passing ~~that~~ my letter from Melvin Chow and information sheet over to Dave Lyman so that he can have Ben Young initiate paper work with Hawn Telephone.

KEMS should have no more involvement ~~with~~ ⁱⁿ this with the exception of informing Ben as to the exact high seas frequencies that we will have on the single side band radio.

7. Some of the materials that are needed to be purchased by KEMS were gathered by KEMS would be a tool box possibly in plastic to contain contact cleaner, a small wire brush, diagonal cutter, an electrician's knife, (although this won't be necessary since every member will have a knife anyway), screwdrivers both straight blade and Phillips type, tape at least 2 rolls, and anything else that Alan Yagi and Ken Yamada can think of to put in a small plastic tool box.

8. The batteries have been sized as follows:

It will take 60 ampere hours for a 40 day trip which will consist of a daily transmission of 20-minute total, 10 minutes warm up, 5 minutes of full receive ^{with} full audio out, 5 minutes transmission at 14 amps. This would mean that they will have approximately 40% reserve in a single battery if we purchase a 100 ampere hour type. It is my intention to provide them with two batteries with a 100 ampere hours each in plastic battery boxes so that this would give them one whole spare to make the whole trip in case something happens to one battery. Alan Yagi shd be

Page 4

in charge for the procurement of the batteries because I want the suppliers of batteries to cycle it, charge it a full, discharge it and charge it back up again to make sure that we don't have any latent defects in a way of bad cells or anything like that. It is my intention to have Leon Sterling and his designated installers to do the mounting of the equipment under our supervision. In talking with Norman batteries will probably be mounted in the starboard hull on the #4 hatch on the ~~flush~~ deck on the forward end. In other words, I do not want the batteries mounted inside the compartment because of gasing. Alan Yagi is to provide water-tight through fittings so they can drill through that ~~deck~~ ^{hatch cover} to bring the batteries leads down to the compartment, probably plastic. We will delay making the final decision on how and where to mount the single side band radio until we get the radios here. The VHF radio can be bagged up in plastic because they won't use it till they get down to Tahiti. I want all cabling for power for both radios installed so they have to do is plug power in, mount the antenna and just make the antenna connection. So remember to put the antenna connector on both VHF antennas. Alan Yagi will be in charge of all installation and check out.

9. The battery panel will consist of a voltmeter, with suppressor ^{or} and an ammeter 0-50 amps. The circuit breaker panel will have all 20 amps breakers in it so they are interchangeable. However, the VHF radio only need the 10 amp breaker but we will oversize it just in case they need to swap over. ^{Either} ~~either~~ that or put in and see if it is going to burn out depending on availability the 10 amp ~~breakers and see if it is going to burn out depending on availability~~ ^{breakers} of breakers. And if it does burn out then they can just put a 20 amps in. But all fuse holders will be jumpered out in the radios. We will use the split panel construction and Leon Sterling will take care of mounting it in the hull. Make sure that after ~~atx~~ we make all the

Page 5

connections to the breakers and the meters, that they are painted with red lead to prevent corrosion and vibration to make the contacts loose. Leon Sterling will provide a chart light which is a self-contained battery operated, it is not to be connected to this battery system. In general the batteries are for communication purposes only.

10. I intend on providing an SWR and power out meter for the single side band radio to be permanently installed. The reason for this is that Norm should be able to tell whether he is putting out any power if he is not able to talk to anybody because they might not ~~be~~ even be on. But in conjunction with the power out meter and ammeter he should be able to tell at least what quality of signal he is putting out. (11) Len Withington please coordinate with Gordon Piianaia for the publicity photos for Raytheon on the Hokule'a final installation. I have not talked to him as yet but I don't see why not since he got all the camera equipment.

(12) Remind Dave Lyman, Raytheon is still missing a letter regarding turning of over/publicity rights. We got the letter for non-profit status.

50