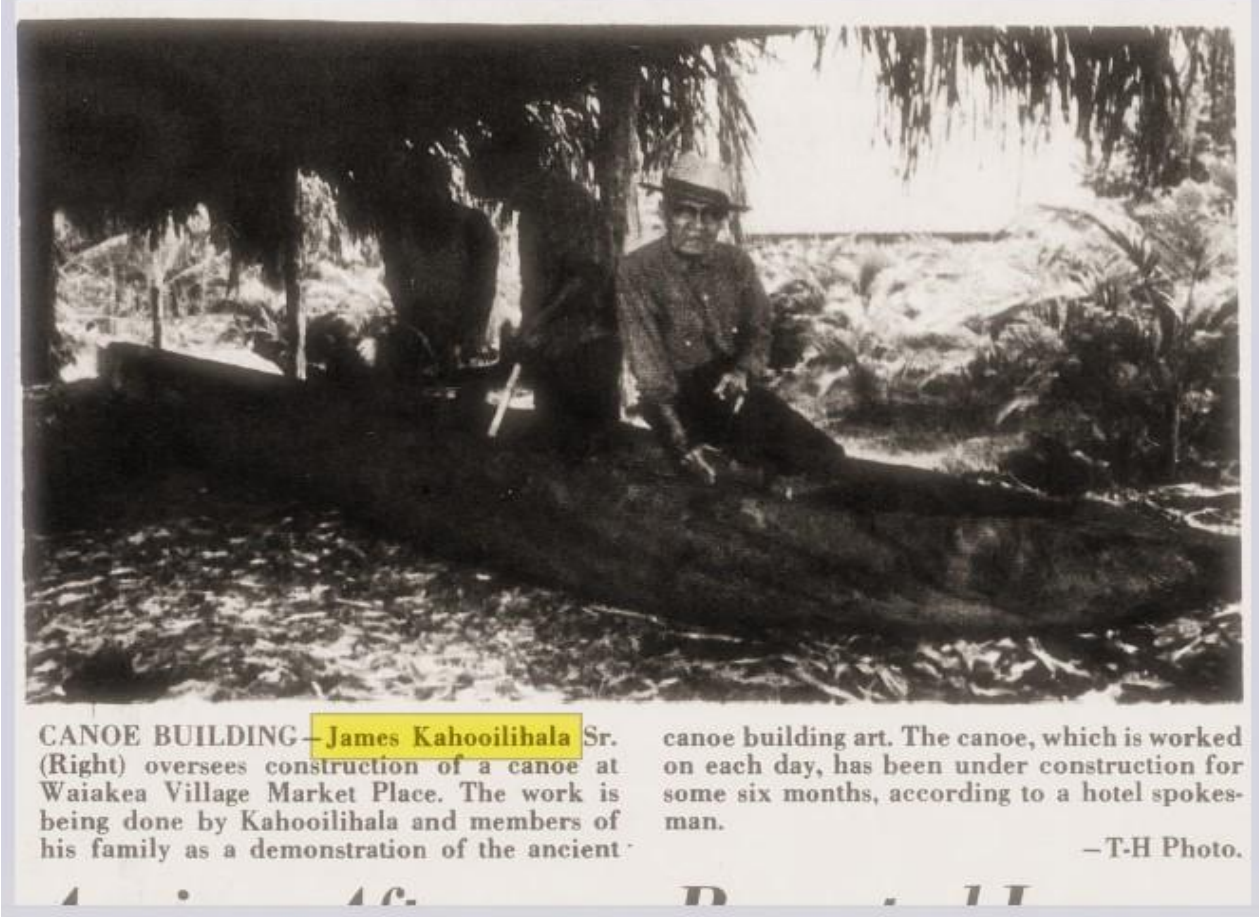
CANOE CONSTRUCTION IN THE 1970‘S



CANOE BUILDING—James Kahooilihala Sr. (Right) oversees construction of a canoe at Waiakea Village Market Place. The work is being done by Kahooilihala and members of his family as a demonstration of the ancient canoe building art. The canoe, which is worked on each day, has been under construction for some six months, according to a hotel spokesman.

—T-H Photo.

In 1973 I was able to observe (and participate to a limited degree) in the construction of a Koa outrigger canoe on the grounds of the then, Waiakea Village Hotel on the shore of Wailoa Fishpond in Hilo.

The canoe was being constructed for the Prince David Kawananakoa Canoe club under the direction of James Kaho’olilihala of Kalaoa South Hilo. Tutu Man’s nephew (that's what we called him, Tutu Man) was Joe Kuamo’o. Joe and I paddled on the Jr. Mens crew for Prince David Kawananakoa Canoe club and Joe was Tutu Man’s primary helper.

Tutu Man was a noted canoe builder in the 1950’s and our club asked him to build this canoe for the club. In our “down time” while working on the canoe I would ask Tutu Man questions about his methods of canoe construction and how he became a canoe builder. In one of our conversations he proudly told me that he was the first Christian canoe builder in his family. He said that his father and his uncles built smaller fishing canoes (18 to 20 feet long) for fishermen in Hilo and along the Hamakua Coast.

He said that the Koa logs were obtained from the forest above Papaikou. He said they would fell the tree in the forest then wait for a rainy period to haul the log down to the shore. He said the mud from the rain would allow the log to slide easier. He described camping out in the forest for several days in order to harvest the tree. He said they used mules or horses to pull the logs out of the forest. He did say that they did do some hollowing out of the log in the forest. He said all the work was done with axes and steel adzes.

On our log, it was hauled onto the Hotel Property by a truck and to the construction shed by two forklifts. After getting the log in place Tutu Man studied it for at least half an hour then instructed the forklift guys to roll it over. Joe told me that Tutu Man was determining what side of the log would be the bottom of the canoe. We would start our shaping on the bottom of the canoe.

Tutu Man then broke out about 5 steel adzes. Some had a straight blade like the wide end of a pick while the others were curved with a scoop shape like that of a spoon. Tutu Man took one of the straight bladed adzes and began to strike the log pulling off small chips of wood. He then instructed Joe and me to grab a straight bladed adze and to the same on either side of him. He instructed us to chip away at the outer layer or sapwood of the log until we hit the darker inner layer of wood.

As I began to hack away at the log Tutu Man sternly told me to stop. He said “take only small chips”. He then picked up the chips I had hacked off the log and compared it to the chips that he had cut off the log. He then told me he did not want any chips bigger than his chips. This would be the first of many stern instructions I would get from Tutu Man.

After a few days of chipping at the log Joe asked Tutu Man if he could use a chainsaw to cut off the sapwood. He asked Joe a whole bunch of questions on how deep the cuts would be and how he would control the blade from not cutting too deep. After he was satisfied that a chainsaw would greatly speed up the process and Joe would effectively control the saw he agreed to let Joe use the chainsaw on the sides of the log. The sapwood on the bottom would still have to be removed by Adze. After almost a month of chipping away at this log (we worked on the log 3 or 4 days a week) it was time to roll the log over and work on the top of the canoe. Tutu Man agreed to let Joe use a chainsaw to flatten the top of the log but only after he had marked a line along the log below Joe would not not cut. I figured the chainsaw saved us about a month of adz work getting it done in two hours.

There were times that I found Tutu Man would get frustrated in trying to answer my questions on why he was doing things. It dawned on me that his frustration came not so much from me asking questions but from him not being able to find the right English Words to give me the answers. It was not until much later that I learned there were many things about the Hawaiian Canoe that did not have English words for. I also realized much later that Tutu Man was viewing the whole process of constructing this canoe from a Hawaiian frame of mind and that there were many concepts that my Western educated mind had difficulty grasping. After several weeks of working Joe told me that Tutu Man told him that I ask too many questions and that I should just watch, follow and work rather than talk. I complied.

Tutu Man was a very quiet man never talking very much, that is until Mrs. Awae, one of the workers at the hotel would stop by. She would talk to him in Hawaiian and he would just light up and have a ton of things to say. Unfortunately I had no idea what they talked about.

After we got the top of the log flattened with a chainsaw, Tutu Man laid a string down the center of the log. He marked a line along the string down the entire length of the log. He then sat down at what would be the stern of the canoe and just stared at the log for over half an hour. He then moved to the front of the canoe and after only a few minutes, began drawing the pointed shape on the flattened log of the bow and the stern using a piece of chalk.

He used the midrib of a coconut leaflet to ensure that both sides of the bow and stern lines were proportionate and equal. He then moved down the entire length of the log making marks at regular intervals using the coconut leaf midrib as a measuring tool, marking the right side of the log then the left.. He then instructed me and Joe to connect his marks using a straight piece of wood down the entire length of the log.

When we were done he started making a second set of marks about two inches inside of the first line. He then instructed us to connect these marks. This would be the inside of the canoe hull. Joe then asked Tutu Man if he could use the chainsaw to cut out the interior section of the log. After a slew of questions he agreed but only after he measured out and marked two more lines down the length of the log adding another 4 inches to the original line that marked the inside of the hull. Tutu Man then made a mark on the Chainsaw blade instructing Joe not to send the blade deeper into the log then the mark on the blade. This mark would leave at least a foot of wood from the tip of the chainsaw blade to the bottom of the canoe log.

After several days of chainsawing and using a steel ax and the steel adzes to remove blocks of wood from the interior of the canoe log we had a deep trench running the length of the log. Tutu Man said we would cut the rest of the wood out using the steel adzes.

All three of us would work on chipping wood out of the trench. While I could go for 15 to 20 minutes of chipping before I would have to rest, Tutu Man at a little slower but more deliberate and rhythmic pace would go for over an hour before resting. In time both Joe and I tried to duplicate Tutu Man's pace and rhythm and found that we could cut just as much wood as our more rapid pace but with less fatigue.

After several weeks of chipping away at the interior of the log Tutu Man instructed us to listen to the sound of the adze hitting the wood. He then instructed us to start at opposite ends of the end of the log and move slowly down the log toward the middle. Several times Tutu Man would sternly interrupt my chipping to inform me I was going too deep. He would take my adz and hit one section of the log and say "Hear that?" "That is the sound I want down the length of the log".

After we made one run down the length of the log Tutu Man would make us start again telling us to hear the new sound and take that sound down the length of the log. I think Joe got the sound

thing down but I never felt I did. The sound of the adz hitting the log is how Tutu Man determined how deep into the hull we were cutting. His plan, that we deduced, was to take the interior of the log down in repeated passes keeping the depth uniform for the length of the log.

After we got the log hollowed out to about 6 inches from the bottom and the sides thinned down to about 4 or 5 inches thick, Tutu Man marked out with chalk, where the Pepeiau were to be located. Pepeiau were small shelves that the seats and the Wae would sit on. Initially all the pepeiau were about 2 feet long. In their finished form they would be 6 to 12 inches long.

At this point I could not hold back and asked Tutu Man how he knew where to place the pepeiau. The placement was critical for load weight and balance in the finished canoe.
He said he started his placement with the stearman seat at the back of the canoe first. “It can’t be too far back nor too far forward”. He said then you place the number one seat at the front of the canoe. Again it can’t be too far forward or too far back. He said you then space out the remaining seats proportionally. He said then you place the pepeiau for the wae. The forward wae needs to be further back from the bow than the rear wae is from the stern of the canoe.

He did not explain how he determined what was not too far forward or too far back. I surmised that was where the art of canoe building came in. He had a “sense” or feeling of where these pepeiau should be from experience and that there was no way to explain this “sense” or feeling, especially not in English.

By this time we were able to flip the canoe log over without the use of a forklift. We got a bunch of paddlers from the club and we just turned it over. Now began the delicate task of shaping the outside of the canoe hull. In the past Tutu Man said they used Hand Planes. But today we were going to use an electric planer.

Tutu Man would look down the length of the upside down canoe log and slowly run his hand down the hull. At each dip he would make a circle with chalk. He would then go to the front and the back of the back of the canoe and gaze down the length of the log. He would then tell us where to plane.

In the process Tutu Man envisioned the location of the ōpū, or bulge on the side of the canoe. The placement of the ōpū would determine how high the canoe rode in the water. This again was determined by experience and feel.

In 1975 there was a break up in the Prince David Kawananakoa canoe club. Some members formed the Hui Waʻa o Waiakea Canoe Club and others formed the Kamehameha Canoe Club. I went with Kamehameha Canoe Club and the Canoe went to the Waiakea Canoe Club. The Canoe was finished but I was not part of it.

While working with Tutu Man I obtained a glimpse into the construction process of a traditional Hawaiian canoe. But more significantly Tutu Man opened my mind up to the fact that if I would

ever be able to truly understand the Hawaiian Canoe, I would have to train my mind to view things from a Hawaiian perspective.

James Pauaka Kahooilihala Jr.

Oct. 18, 2012 James Pauaka "Kainoa" Kahooilihala Jr., 95, of Papaikou, Hawaii, a retired firefighter and truck driver, Hawaii Army National Guard veteran and an Army veteran who served in World War II, died at home. He was born in Kalaoa, Hawaii. He is survived by sons Richard Kahalewai and Francis Bento; daughters Faith N.K. Bromwich, Elizabeth N. Pacheco, Jamie L. Kahooilihala, Veronica Egan and Elnor Bento; 16 grandchildren; 32 great-grandchildren; and six great-great-grandchildren. Visitation: 6 p.m. Wednesday and 8:30 a.m. Thursday at Dodo Mortuary, Hilo. Services: 7 p.m. Wednesday and 10:30 a.m. Thursday. Burial: noon at Hawaii Veterans Cemetery No. 1. Casual attire.

Dale Fergerstrom of the Prince David Kawananakoa Canoe Club of Hilo demonstrates the ancient art of canoe making at Saturday's official grand opening of Waiakea Resort Village and The Marketplace.—T-H Photos.

Hui Waa 'O--2 Years Of Canoe Club's Sweat

By Marcia Reynolds
Tribune-Herald Staff Writer

Three years of plans and work have gone into the building of the Hui Waa 'O Waiakea Canoe Club's new koa wood canoe which will be launched Saturday.

The 22-foot canoe was hand-carved by James Kahoolilihala, 81, of the Big Island in a palm-thatched shelter in the marketplace of Waiakea Resort Village.

Kahoolilihala followed the traditional Hawaiian method, using only steel adzes for carving and a length of string to measure gunwales, bow and stern.

The koa tree selected for the canoe grew in Keauhou Mauka and is estimated to be over 100 years old.

The original height of the tree was more than 100 feet and the base was so large that it could not be circled by eight men joining hands.

The tree was cut by Campbell-Burns and was trucked to a canoe shed in Hilo.

The first step in building the canoe was to taper the tree at both ends and then flatten the sides, bottom and top. The inside of the canoe was outlined and the pepeiao (brackets on which the seats rest) were blocket out.

The next step was to shape the upper part, the gunwales and then the sides of the canoe. After this, the mouth (waha) of the canoe was turned downward and the iwi kaele, or bottom, was carved into shape.

The outside of the canoe was rubbed smooth and then hand rubbed with several coats of kukui oil.

The Hui Waa 'O Waiakea Canoe Club was formed in January 1975, but the club's history dates back to May 1972 when the club was known as the Prince David Kawananakoa Canoe Club headed by George Naope.

The club's first canoe was a 40-foot fiberglass racer named The Prince David.

The club sponsors the Fourth of July Regatta at Hilo Bay in honor of the late John Kekua Sr., who was one of the founders and officers of the Prince David Kawananakoa Canoe Club.

On Saturday, there will be demonstrations by the Hualani Senior Citizens of Hawaiian quilt making, lauhala weaving, ti craft, lei making and poi pounding. The blessing and dedication of the canoe at Waiakea Resort Village will be held at 2 p.m. by the Rev. David Kaapu of Haili Church and Joseph Kahananui

The canoe club will host a luau Saturday night.

Obituaries

Henry Kawelanakala Kahale

The funeral for Henry Kawelanakala Kahale, 68, of 426 Todd Ave., will be at 1 p.m. Friday at the Haili Church.

Born on Niihau, he died Sunday at Hilo Hospital. He was a retired police officer for the County of Hawaii and a member of