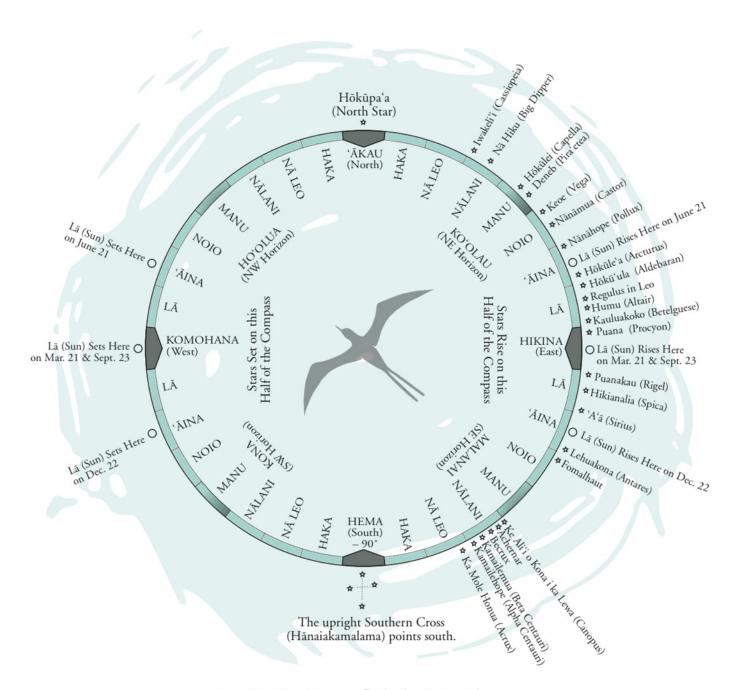
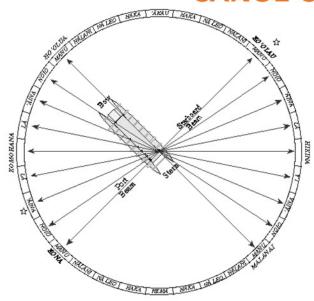
WAYFINDING & SEAFARING RESOURCES



Hawaiian Star Compass © Charles Nainoa Thompson

Be sure to check out other resources at: https://www.ksbe.edu/digital/holomoana/

CANOE COMPASS





The reference marks on the railings are used in conjunction with the star compass to guide the canoe by the rising and setting points of celestial bodies (sun, moon, and stars)

READING SWELLS & WINDS

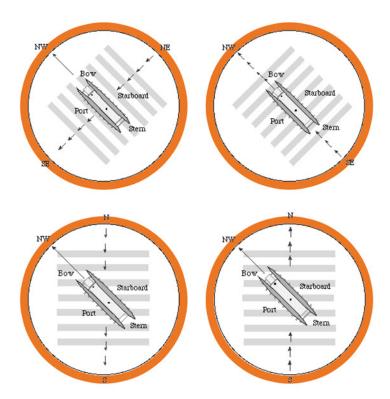
Swells

Swells move in a straight line from direction to the opposite direction 180° away. The star compass can also be used as a swell compass.

After the navigator orients the canoe to the swell, by felling the pitching, rolling, or corkscrewing of the canoe; if the motions changes the navigator knows that the canoe is no longer going in the same direction (assuming the direction of the swells remain constant). The motion gets complex when more than one swell is running. An experienced navigator can feel as many as four or five swells.

Winds

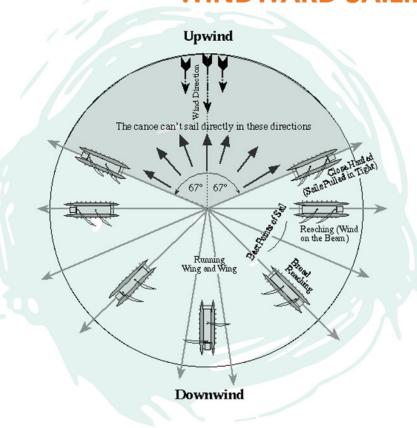
The direction of the wind can be used to hold a course. The steerman simply holds the wind at a constant bearing on the canoe. However, the wind may change directions (it is less stable than swells).



Be sure to check out other resources at: https://www.ksbe.edu/digital/holomoana/

Credit/Resource:

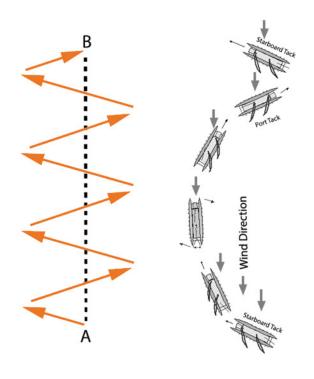
WINDWARD SAILING ABILITY



Sailing Ability

Most Hawaiian voyaging canoes do not have keels or dagger boards. As a result they can sail about 67 degrees or about 6 houses from the wind.

If the canoe needs to head toward the direction from which the wind is blowing, it will sail off to the side, while remaining close as possible to the wind direction (i.e., close-hauled), then change tacks to the other side, making forward progress in a tedious zigzagging pattern known as tacking.



Tacking

Tacking involves sailing in the direction of the wind in a zigzag pattern, like switchbacks on a mountain trail. In general one should try to plan a trip so that tacking is minimized, as it may (depending on the windward ability of the vessel) take up to five times longer to tack a given distance than it does to sail there directly. Sometimes however, tacking is the best or only maneuver for getting to one's destination.

Be sure to check out other resources at: https://www.ksbe.edu/digital/holomoana/

NA 'OHANA HOKU EHA

The Four Star Families



Kekaomakali'i (The Bailer of Makali'i)

Makali'i is one Hawaiian name for the Pleiades star cluster. It was frequently used by navigators of long ago and is still used today.



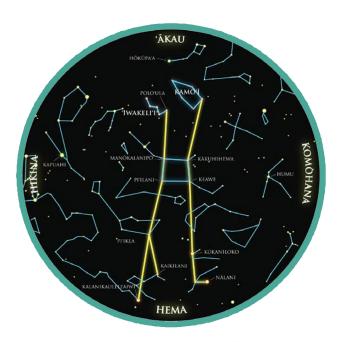
Manaiakalani (Maui's Fishhook)

The magic hook of the Hawaiian demigod Maui shares many of the same stars as the constellation Scorpius and was named Manaiakalani.



Kaiwikuamo'o (The Backbone)

This starline is called "Backbone" for it runs from the North Star, Hokupa'a (Fixed Star) to Hanaiakamalama, the Southern Cross.



Kalupeakawelo (Kite of Kawelo)

The four stars in the kite of Kawelo are named after four prominent chiefs of the islands: Manokalanipo, chief of Kaui, Keawe, of Hawaii Island; Piʻilani, of Maui; and Kakuhihewa of Oʻahu.

Be sure to check out other resources at: https://www.ksbe.edu/digital/holomoana/