Hawaii: A Stepping Stone to Space?

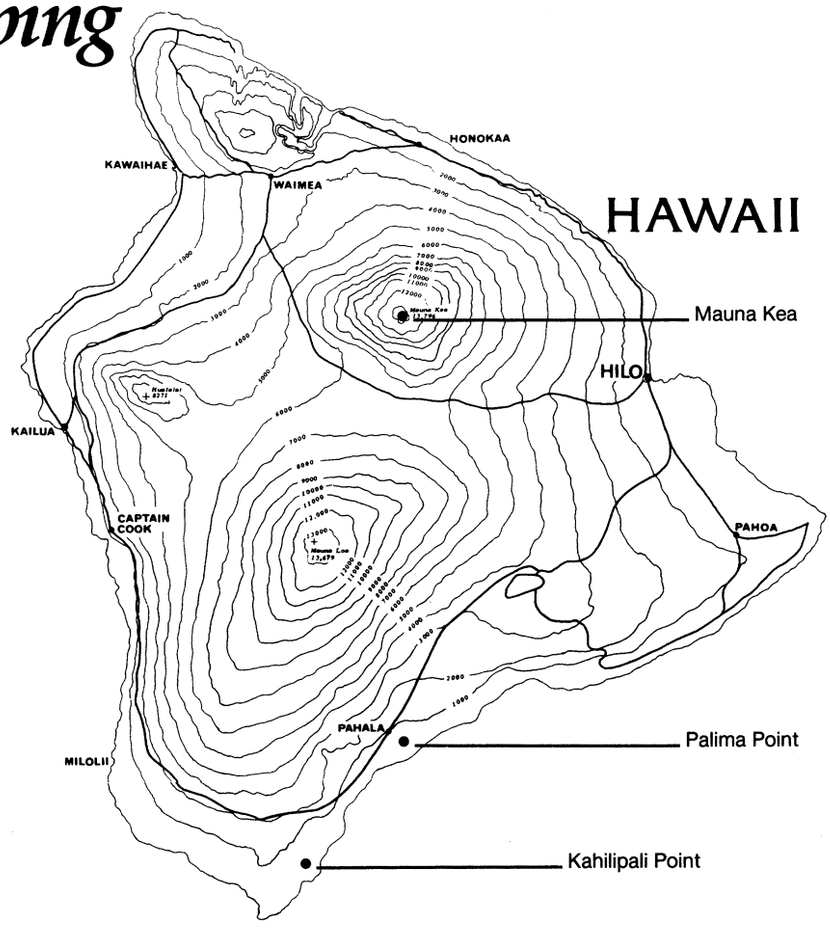
By JONATHAN EBERHART

The idea of launching satellites into orbit from the island of Hawaii conjures up bizarre images of high technology amid the palm trees, flaming rockets against azure seas and golden sands. NASA first looked at the possibility more than a quarter-century ago, barely five years into the Space Age, but it never came to fruition. Now a study financed by the state itself, to the tune of more than half a million dollars, has resulted in the selection of what the study's authors call "the best site for a Hawaii commercial space launching facility."

It is by no means a *fait accompli,* however. State officials crave the income that spaceport-related industries might bring to Hawaii's tourism-dependent economy, and the plan offers what might turn out to be a unique advantage as the only U.S. launch site from which spacecraft could be sent into either equatorial or pole-crossing orbits. But George Mead, special projects manager for Hawaii's Department of Business and Economic Development, notes that the state would neither build nor pay for the island spaceport; nor would the federal government. The state, he says, would provide only an access road, electricity, water and similar services "up to the [outside of] the fence." Instead, it would be a true test of a theme long touted by President Reagan and formally set forth in his new space policy directive: an increased role for private enterprise.

And there are other bridges to cross. The study, conducted by Arthur D. Little, Inc. (ADL) of Cambridge, Mass., began a year ago and is scheduled to be completed by early April, according to ADL Vice-President Harry Foden. The first six months went for an overall evaluation of what benefits space-related activities could bring to the state, which is already home to the growing complex of telescopes on Mauna Kea as well as sounding rocket activities conducted by the Defense Department. Part 2 identified seven candidate sites, which were then narrowed down to a preferred location and an alternate, based on a variety of environmental, economic and other factors.

The selected region, which was announced Feb. 22, is called Palima Point, southwest of the southern boundary of Volcanoes National Park. There are no residences in the area, which is large enough to encompass the plan's objective of four launch pads, each capable of supporting rockets the size of a Titan, plus a 1.5-mile safety area and a 2.9-mile "public control zone."



Hawaii Dept. of Business and Economic Development

Palima Point on Hawaii has been identified by the state as its best site for future commercial satellite launchings. Officials hope business will follow.

The alternate site is Kahilipali Point, farther south around the island, which according to the study offers the same safety margins but with a complicating factor. The area includes property belonging to more than 100 different landowners, as well as leaseholdings in territory set aside by Congress some 60 years ago as homeland for native Hawaiians.

The issue of Hawaiian-native homes is a controversial one. Both of the selected sites are in a district called Ka'u, where a citizen's action group opposed an ultimately unsuccessful 1982 attempt by Houston-based Space Services, Inc. (SSI) to set up a private launch facility.

The economic situation of many Ka'u residents is difficult. Unemployment in the district is reported at nearly 12 percent, and a significant portion of the local population receives aid from the Hawaii County Economic Opportunity Program.

Another factor is the possible effect that developing a rocket-launch facility could have on the big telescopes on Mauna Kea, about 45 miles away. There are essentially three varieties of contamination needing further study, says Mead. Light pollution (caused not necessarily by the launches themselves but by the related construction and operations) is likely to be small, he says, and can probably be remedied by shielding or other methods. Also, Mead adds, interference from the radio frequencies used by such activities should be minor. The third category is upper-atmospheric pollution due to the rocket exhaust, and that one, according to Mead, will need further study in the course of preparing an environmental impact statement for the planned launch facility. Producing the statement, he says, could take 18 months.

Another consideration will be whether the economics of the private launch business will prompt a private firm actually to build and operate the facility. The cost and other obstacles, says SSI head and former astronaut Donald K. Slayton, could be formidable. Says Slayton, "If you want my opinion, there will not be a commercial launch site built on Hawaii in this century." □