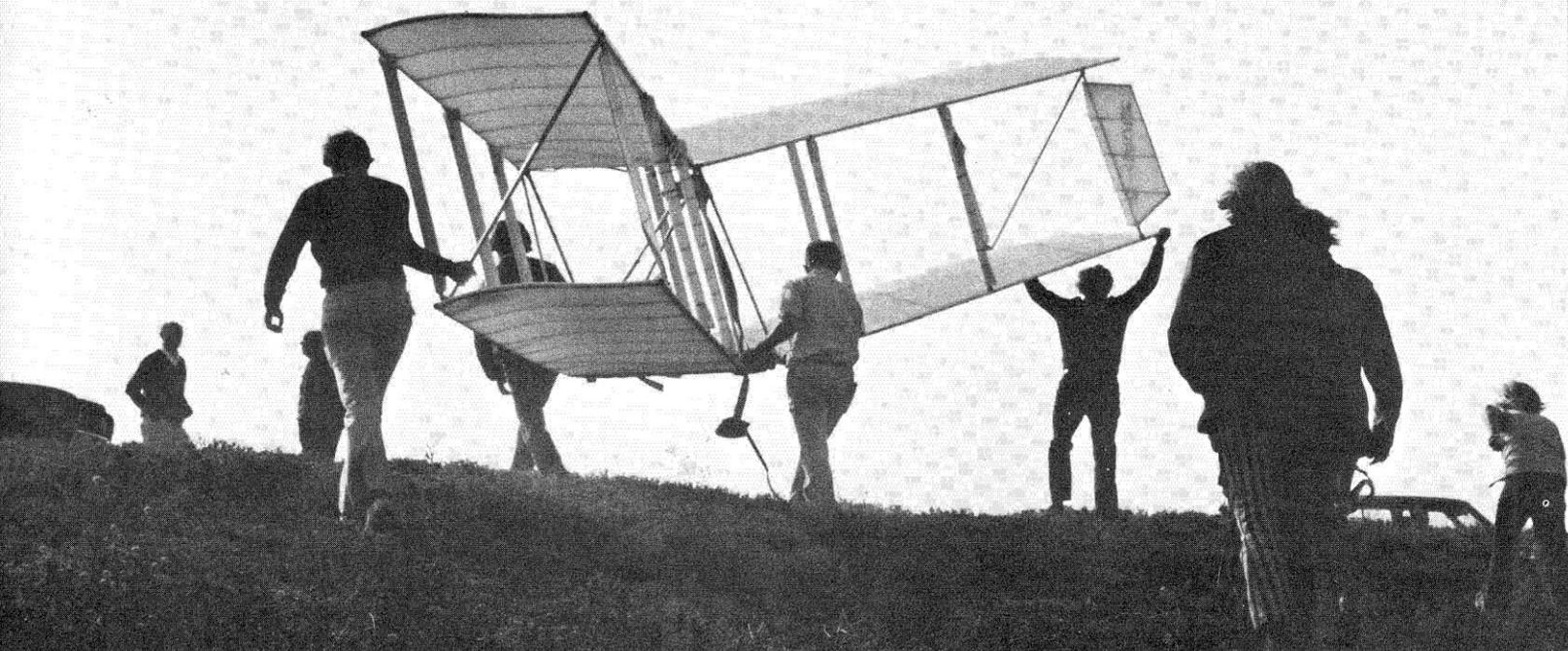


# High-Flying Freshman



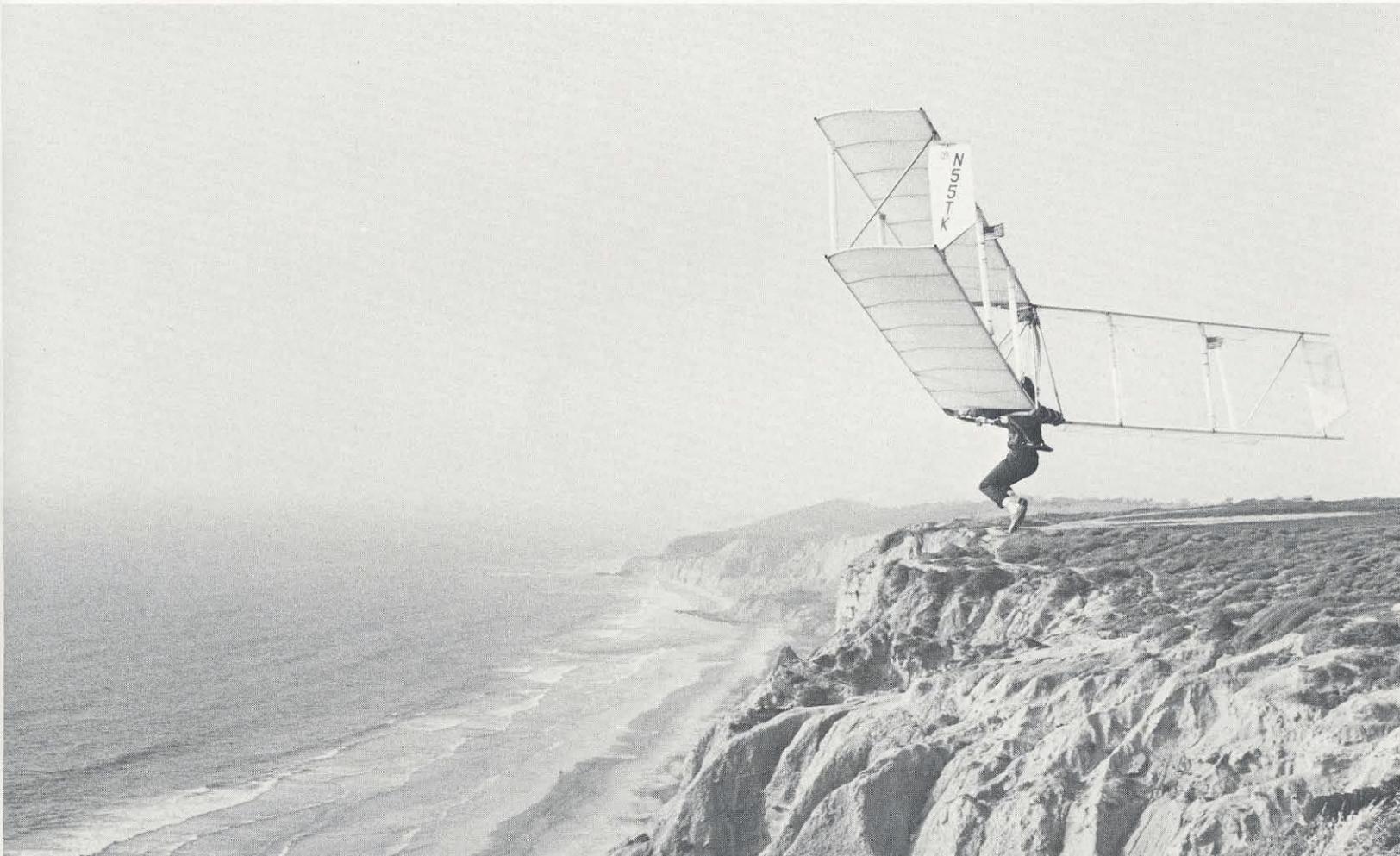
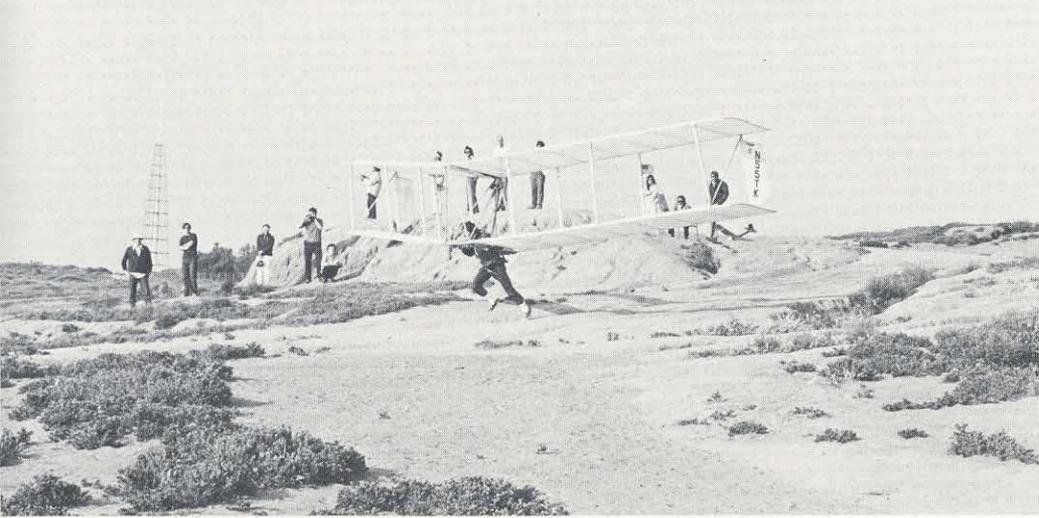
Once a month Caltech freshman Taras Kiceniuk Jr. spends a day at his favorite occupation—hang-gliding—with, of course, a little help from some other glider buffs to carry his craft to a good jumping-off spot. Taras usually goes to Torrey Pines, which has 400-foot-high cliffs and updrafts from the beach strong enough to carry him high above the land. He soars for an hour or two, dangling by his armpits beneath his flimsy-looking biplane, Icarus. The craft is one of several he has designed, built, and marketed since he took up this daredevil sport as a high school freshman.

## High-Flying Freshman . . . *continued*



Each flight takes meticulous preparation. First, the 55-pound, 29-foot-wide glider has to be assembled (in this case, with the aid of a novice in the sport—Eugene Shoemaker, Caltech professor of geology). The craft is made of heavy-duty aluminum tubing, 500-pound-strength wire, and double-ply plastic covered by aircraft doping. It takes about an hour and a half to put together. A second—and critical—step is to test the wind velocity and direction. Ready to go at last, Taras lifts the glider's control bars under his arms, adjusts his seating, and waits for a good gust of wind.





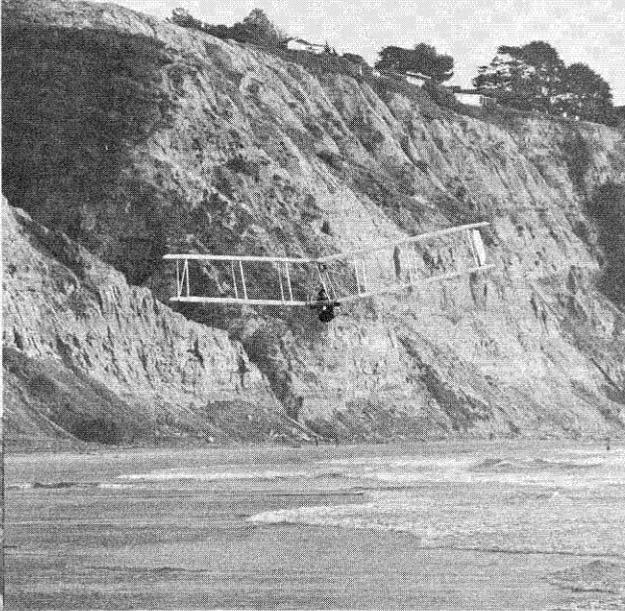
A good hang-glider pilot must, first of all, be a good sprinter. He also must be confident (i.e., crazy) enough to race at full speed to the edge of a cliff and jump off, relying on the homemade wings of the glider to support him. For a successful takeoff, Taras and *Icarus* must be traveling at about 15 miles an hour.

## High-Flying Freshman . . . *continued*



By the time Taras finishes gliding leisurely back and forth along a two-mile stretch of beach at Torrey Pines, he will have flown about 50 miles, or 300 times farther than the Wright brothers did 70 years ago in an engine-powered biplane of similar design. Other people have gone higher in hang-gliders, because they have jumped from higher spots, but Taras has set a world record for total altitude gain—jumping from a 500-foot cliff and soaring to 1,800 feet.





At the end of the flight, Taras brings *Icarus* in for a gentle landing. He braces his feet on the aluminum tubing and swings backward and forward in the seat sling to control the glider. A final backward motion brings the front of the glider up enough to slow his speed for a comfortable landing. Then, dropping his feet, he calmly walks to a stop.

