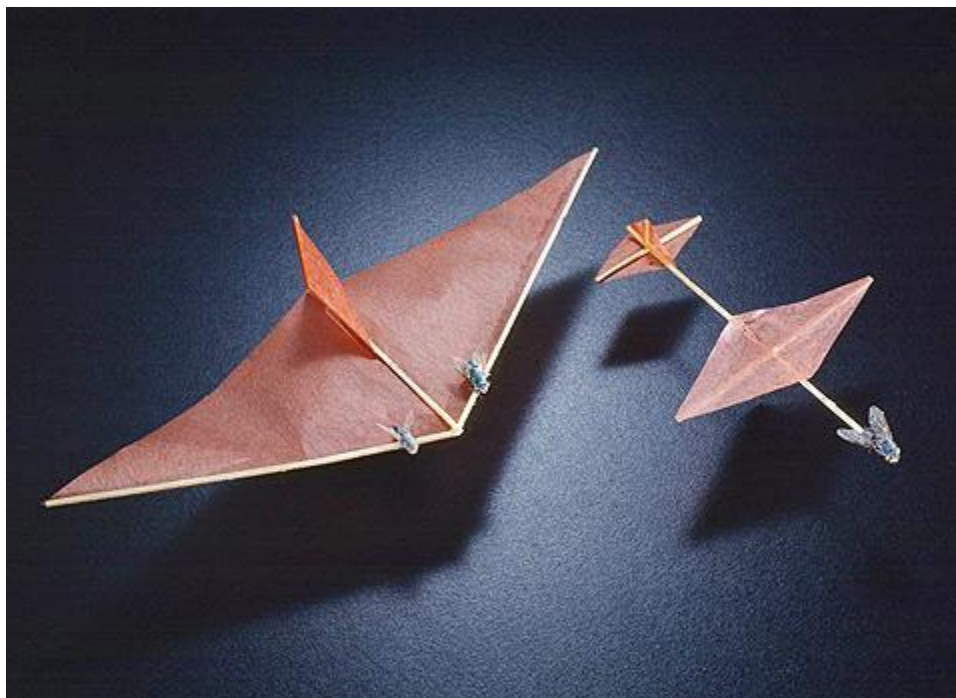


## Insect Power

When a colleague of ours, the curator of the model airplane collection, Tom Dietz, passed away recently, I was reminded of the time I spoke with him about two of the Museum's model airplanes that I find most intriguing.



Designed and built by famed aircraft modeler Frank Ehling in the 1970s, they are the smallest flying models the Museum owns. But more unusual than their size is that they are powered by flies – yes, you heard right, *houseflies*, the insect. Constructed from balsa wood and red tissue paper, the one-fly design has a wingspan of two inches, and the two-fly version, which features a delta-wing design, is four inches wide. In both cases, contact cement was used to attach the live powerplant to the fuselage.

*The Washington Post's* 2001 obituary of Ehling described the procedure for procuring the flies: "...Ehling honed an effective technique involving cupping a fly with his hands and then hurling it to the ground to knock it unconscious. He would then dab glue on its rear end, carefully avoiding its delicate wings, and attach the fly to the plane. He also was known to capture the fly, stick it in the freezer and glue it to the wood while it was immobile from the cold.

“Either way — as the fly gained consciousness or returned to room temperature — the winged insect would lift the model plane into the air.”

Theoretically, when the fly tired from its effort to stay airborne with the additional weight and drag of the airplane, the model would then glide to the ground.

Maybe you would like to build an airplane piloted by a fly. Many kits (flies not included) are available online and you can find them by googling “fly-powered airplane.”

To learn more about the Museum’s unparalleled model aircraft collection, check out the book, [On Miniature Wings: Model Aircraft of the National Air and Space Museum](#), by Thomas J. Dietz, with photographs by Eric Long.